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A Stakeholder Approach to the Development of a Framework for Forensic Accounting Education within the Jordanian Context

A thesis
submitted in fulfilment
of the requirements for the degree
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Abstract

If there is one business theme that has emerged over the last decades, it is financial corruption in the form of scandals. Billions of dollars in financial losses and an erosion of public confidence in financial reporting have been the result of high-profile corporate financial scandals (Markham, 2006). These scandals raise questions about the role of the audit industry in alerting a broad spectrum of stakeholders to the realities of corporate wrongdoing (Cooper & Neu, 2006; Trompeter, Carpenter, Desai, Jones, & Riley, 2012). The problems exposed by the financial scandals are of such magnitude that the total financial reporting system has been called into question (Huber, 2012). These scandals have also highlighted the need for forensic accounting practice and education (Ronen, 2002; Stephens, 2005). Nevertheless, Heitger and Heitger (2008) accuse academia of not having a “wide understanding and appreciation” (p. 561) of forensic accounting as both a profession and a field of practice.

Where limited academic studies into forensic accounting have been undertaken, the research has tended to consist of either survey studies that examine the perception of academics and practitioners regarding the importance, relevance, and delivery of forensic accounting education (e.g., Daniels, Ellis, & Gupta, 2013; Kramer, Seda, & Bobashev, 2017; Rezaee, Crumbley, & Elmore, 2004) or of studies that examine the role of forensic accountants in detecting and preventing fraud (e.g., Luke, 2013; Alabdullah, Alfadhl, Yahya, & Rabi, 2014). Some forensic accounting studies such as Efiong (2012) and Ramamoorti, (2008) have also focused on cultural and contextual influences on forensic accounting practice and education.

Such study of the various aspects of forensic accounting has contributed to improving understanding of its application, form, and characteristics. However, despite the steady growth in academic knowledge about forensic accounting, limited background information exists with respect to forensic accounting education in the context of developing countries and, in particular, in relation to the Hashemite Kingdom of Jordan (Elitas, Karakoç, & Görgülü, 2011; Alkubaisi, 2016; Alabdullah et al., 2014). In aiming ‘to develop a framework for forensic accounting education compatible with Jordan’s unique culture and business environment’, this

study, therefore, contributes significantly to practical knowledge in this area. In addition, this study contributes significantly to theoretical knowledge in forensic accounting by developing a comprehensive definition of forensic accounting that reflects an accurate picture of how the concept is perceived by a range of stakeholders. This study also enriches the extant literature by examining: accounting curricula reform; culture-sensitive curriculum development; links between culture and fraud and corruption; and, accounting for the public good.

Finally, this study makes a further significant contribution to studies on forensic accounting education because of its attempt to garner the perceptions of a wide range of forensic accounting education and services stakeholders on a framework for forensic accounting education. In this way, this study extends beyond the traditional ‘academics and practitioners’ approach followed in most research (e.g., DiGabriele, 2007; Daniels et al., 2013; Rezaee et al., 2004). Stakeholder theory provided the theoretical basis for selecting participants who are argued to be representative of the wide range of forensic accounting education and services stakeholders in Jordan.

In order to investigate particular requirements that should be taken into account in relation to forensic accounting practice and education in Jordan, 40 Jordanian participants, representing accounting academics and practitioners and decision makers from the private and public sector in Jordan, lawyers and legal experts, as well as Islamic theologians, were interviewed. Additionally, thematic analysis was used to review relevant documents, websites, and reports of oversight and government agencies in Jordan as along with professional literature.

In addition to the theoretical and practical contributions they make, the findings of this study have implications for three key stakeholder groups: (1) the Jordanian leadership, policy makers and civil society associations (2) oversight agencies and the Jordanian Association of Certified Public Accountants, (3) curriculum developers and education providers. It is hard to disentangle the overall impact of religion and culture in shaping Jordanians’ perceptions, behaviours, and actions from the wider context and primarily from the political, economic, and regulatory factors. The findings of this study highlight a gap between the citizens’ ideas of

morality, rights, and responsibilities that stem from the dominant culture and beliefs, on the one side, and the rules and regulations imposed by the state on the other. This gap has created many political and economic issues, and continues to cause tension between citizens and the state. The study recommends that the state must consider the dominant beliefs and cultural norms when shaping its policies, laws, and regulations.

In the fight against fraud and corruption, it is essential that Jordanian oversight agencies win the respect of businesses and the public. Real and perceptible legislative revisions and reforms are required to build public trust and business-government-civil society partnerships. The broader the partnership the better. Unless there is a political will to change the philosophy of the political and administrative entrepreneurial leadership in Jordan, anticorruption efforts and forensic accounting knowledge and techniques may fail to yield fruitful results.

Reform in accounting education is needed in Jordan. This reform should consider the integration of forensic accounting into the universities' accounting curricula. As financial scandals have created a crisis of credibility for the accounting profession, this study suggests that forensic accounting has the potential to restore the credibility of the profession through addressing three key matters: first, enhancing graduates' skills and competencies to meet market needs; second, raising future graduates' ability to make ethical decisions; and, third, taking accounting education beyond its technical dimension and re-establishing its connection with the political and social world.

Dedication

To my late father, Khaled and my grandparents for the good memories they have left which inspired me to be the kind of son and grandson they would be proud of.

To my parents, Amal and Fadel, for their unconditional love, encouragement and support.

To my wife, love, and home, Ruba, for standing by my side, holding my hand through it all.

And to my children, Rahaf, Khaled, and Raiyah, for being my reason to look forward to the next day.

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وَقَالُوا الْحَمْدُ لِلَّهِ الَّذِي هَدَانَا لِهَذَا وَمَا كُنَّا لَنَهْتَدِيَ لَوْلَا أَنْ هَدَانَا اللَّهُ

“God who guided us to this, deserves all praise. Had He not guided us, we would never have been able to find the right direction.” (Qur’an, 7:43).

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List of Abbreviations

ACA or FCA	Chartered Accountants in England
ACFE	Association of Certified Fraud Examiners
ACFS	Association of Certified Fraud Specialists
ADR	Alternative Dispute Resolution
AICPA	Association of International Certified Professional Accountants
ASE	Amman Stock Exchange
SAE	Amman Stock Exchange
ASEZ	Aqaba Special Economic Zone
BOD	Board of Directors
BS	Bachelor's Degree
CA or FCA	New Zealand Chartered Accountant
CAQDAS	Computer Assisted Qualitative Data Analysis Software
CPI	Transparency International's Corruption Perceptions Index
CFE	Certified Fraud Examiners
CNN	Cable News Network
DIP	Development and Investment Projects Fund of the Jordan Armed Force
EACEA	The Education, Audiovisual and Culture Executive Agency
EY	Ernst & Young
FAMG	Forensic Accounting Management GroupCanada
FBI	Federal Bureau of Investigation—USA
FCPAS	Forensic CPA Society
FDI	Foreign Direct Investment
GAAP	Generally Accepted Accounting Principles
GDP	Gross Domestic Production
GFC	Global Financial Crisis
GID	General Intelligence Directorate
HEAC	Higher Education Accreditation Commission
IAESB	International Accounting Education Standards Board
ICTs	Information Communication Technologies
IM	Instant Messaging/ Messages

IT	Information Technology
JACC	Jordan Anticorruption Commission
JACPA	Jordanian Association of Certified Public Accountants
JCPA	Jordanian Certified Professional Accountant (JCPA) certificate
JIACC	Jordan Integrity and Anticorruption Commission
JOFICO	Jordan French Insurance Company
JPMC	Jordan Phosphate Mines Company
JPRC	Jordan Petroleum Refinery Company LTD
KPMG	One of the Big Four (audit firms)
MENA	Middle East and North Africa
MP	Member of Parliament
NACVA	National Association of Certified Valuation Analysts
NCHR	National Centre for Human Rights—Jordan
NGOs	Nongovernmental Organisations
OLAF	European Anti-Fraud Office
PBUH	Peace Be Upon Him
PwC	PricewaterhouseCoopers, one of the Big Four (audit firms)
SAS	Statement of Auditing Standards
SFO	Serious Fraud Office—New Zealand
SFIO	Serious Fraud Investigation Office—India
SNHU	Southern New Hampshire University
SOX	Sarbanes-Oxley Act
UNC Charlotte	University of North Carolina at Charlotte
UNCAC	United Nations Convention against Corruption
UNCTAD	United Nations Conference on Trade and Development
UNDP	United Nations Development Programme
UNHCR	United Nations High Commissioner for Refugees
UNRWA	United Nations Relief and Works Agency for Palestine Refugees in the Near East

Chapter 1

Introduction

1.1 Background

Fraud and corruption are serious and growing problems for businesses in the global economy (Hogan, Rezaee, Riley, & Velury, 2008; Levi, 2013). A survey by the Association of Certified Fraud Examiners (ACFE) (2018) suggests that organisations lose about 5 per cent of revenue amounting to US\$4 trillion per year to fraud.

Fraud and corruption in developing countries have their own complexity (Okoye, 2009). In developing countries, fraud and corruption is more prevalent in public sector organisations (Adefila, Kasum, & Olaniyi, 2005; PricewaterhouseCoopers (PwC) ,2014a) and perpetrators are often not held to account (Kasum, 2009; Transparency International, 2016). The lack of accountability in public sector, weak legal system, bureaucratic traditions, and economic isolation are identified as major causes of corruption in developing countries (Gurgur & Shah, 2005; Schenker, 2015).

The Transparency International Corruption Perceptions Index (CPI) (2017) ranks all Middle Eastern countries except United Arab Emirates and Qatar below the world median, which suggest serious corruption problems exist in the region. Similarly, a PwC (2016) global economic crime survey indicates that respondents in the Middle East expect firms to experience an increased level of economic crime, with almost 48 per cent projecting incidents of corruption and bribery. Increased levels of fraud and corruption numbers highlight the need for forensic accounting services and education (Ronen, 2002; Stephens, 2005).

1.2 Context of the Research

In the aftermath of the recent global financial scandals, there has been a negative perception of auditors independence, and of the effectiveness of traditional audit procedures to protect users from fraudulent financial reporting (Hao, 2010; Huber, 2012). Smith and Crumbley (2009a) emphasise the growing need for professional accountants to understand the area of financial statement fraud, and Shim and Siegel (2001) identify a need for forensic accountants who have deeper understanding of fraud.

Despite the growing need for accountants with forensic accounting skills, limited background information exists with respect to forensic accounting education in the context of developing countries and, in particular, in relation to the Hashemite Kingdom of Jordan (Alkubaisi, 2016; Elitas et al., 2011; Alabdullah et al., 2014). The way in which accounting practices are taught in developing countries, and the solutions to their unique problems, requires a different approach when compared to that of Western countries (Hopper, Lassou, & Soobaroyen, 2017). Far more than Western countries, developing countries require the services of highly skilled accountants who can go beyond bookkeeping to be a positive force in the fight against fraud and corruption (Kirtley, 2016).

The Hashemite Kingdom of Jordan¹ (hereafter referred to as Jordan) has not been immune to international financial scandals, as evidenced by a number of high-profile fraud and corruption cases referred to the Audit Bureau of Jordan and the Jordanian Anticorruption Commission (Najjar, 2010). One case known as Casinogate (The Jordan Times, 2012) sparked a crisis in Jordan's parliament, as protests followed the parliamentary vote which cleared the former Prime Minister Marouf Al-Bakhit and his cabinet of all charges related to the case (AmmoNews, 2011). Several political parties and parliamentarians blamed the lack of independence of the anticorruption authority as a reason for corruption. An urgent need for forensic experts who are able to develop, coordinate, and implement

¹ The official Arabic name for the Hashemite Kingdom of Jordan is *Al-Mamlakah al-Urduniyyah al-Hāshimiyyah*.

effective anticorruption strategies was highlighted (Al-Jazeera Investigations, 2013).

Accountants with specialised forensic skills and knowledge contribute to strengthening transparency, facilitating accountability, building public trust, and supporting the economic growth which developing countries seek (Kirtley, 2016). However, higher education providers in developing countries lack the administrative, human, and fiscal resources necessary to provide an adequate level of accounting education (PanduRanga, 2013; Samkin & Stainbank, 2016). Moreover, the accounting profession in developing countries, including Jordan, faces various political, regulatory, and sociocultural obstacles which act as barriers to accountants' playing an effective role in protecting the public interest and creating public value (Alkubaisi, 2016; Hopper et al., 2017). Hence, it is contended that research into forensic accounting education in the Jordanian context is needed to fill the gap between forensic accounting demand and supply.

1.3 Research Objective and Questions

The overall objective of this study is to develop a framework for forensic accounting education compatible with Jordan's unique culture and business environment. In order to achieve this objective, this study explores the incentives and barriers that exist to teaching forensic accounting in Jordan; reveals the opportunities and challenges and the particular requirements that should be taken into account in relation to forensic accounting practice; and, investigates the competencies that forensic accountants require. Traditionally, and particularly in the context of developing countries, accounting education content has included only a small number of forensic or fraud-related topics (Pearson & Singleton, 2008). This study provides a unique contribution by developing a framework for forensic accounting education in an attempt to fill the gap between forensic accounting demand and supply in Jordan (Alkubaisi, 2016). In aiming to develop a framework for forensic accounting education, this study, therefore, contributes to practical knowledge in this area. Furthermore, this study extends beyond the traditional approach taken by 'academics and practitioners' in most research (e.g., DiGabriele, 2007; Daniels et al., 2013; Rezaee et al., 2004) and attempts to garner the

perceptions of a wide range of forensic accounting stakeholders on a framework for forensic accounting education.

In addition to practical implications, this study contributes to theoretical knowledge in forensic accounting by developing a definition of forensic accounting that accurately reflects how the concept is perceived by a range of stakeholders. This study also enriches the extant accounting literature by examining: accounting education reform; culture-sensitive curriculum; links between culture and fraud and corruption; and, accounting for the public good.

The following research questions will be used to guide the research design and the process of data collection and analysis:

1. What incentives and barriers surround forensic accounting education in Jordan?
 - What is the current state of forensic accounting practice and education in Jordan?
2. What reforms are necessary to develop forensic accounting practice and education in Jordan?
3. What should the framework for forensic accounting education in Jordan be?

Research questions 1 and 2 investigate the implications of Jordan's cultural and contextual environment in terms to forensic accounting practice and education. This investigation aims to define the curriculum problems in Jordan and to formulate the objectives of forensic accounting education and the particular requirements that should be taken into account when developing a forensic accounting education programme. Moving from this basis, research question 3 explores the interviewees' perceptions regarding the learning outcomes and design of the forensic accounting education framework.

1.4 Research Methodology and Methods

This research adopts both a qualitative and a pragmatic research methodology. The pragmatic approach highlights the role that cultural influences play in shaping

values and perceptions and in explaining human behaviour. The aim of this study is to gain a deeper understanding of cultural effects on humans' behaviour and specifically to gain new insights into forensic accounting practice and education within a Jordanian context. Thus, it is argued that the pragmatic approach is consistent with the aim of this study. Furthermore, the field of forensic accounting is relatively new. Hence, it is necessary to pay attention to both the breadth and depth dimensions of the study. For this reason, adopting a pragmatic approach will allow the research goals to be explored in depth, while also allowing other themes to emerge from the analysis.

The literature review process will assist in outlining the research problem and defining the research objectives and questions. A thorough literature review will provide a basis for the interviews. The document analysis method (Bowen, 2009) will also be employed to review relevant documents and websites and reports of oversight agencies and government agencies. The primary source of data collection in this research will be a semistructured interview. Forty interviews with academics and practitioners will be conducted to capture experiences and viewpoints surrounding the development of a framework for teaching forensic accounting in Jordan. The detailed research methodology and methods are presented in chapter 5.

1.5 Scope of the Research

The geographical scope of this study is Jordan. However, given the similarity in religion, language, norms, values, ideas, policies, capabilities, and regime forms in other parts of the Middle East, it is argued that the framework that will be developed through the current study can be generalised to the wider Middle East. Jordan has been selected as a representative of the Middle Eastern countries. As Jordan is the home country of the researcher, a factor which will facilitate the collection and interpretation of data. In addition, Jordan is a role model for Middle Eastern countries in terms of education, as its education sector has a good reputation which increasingly attracts students from neighbouring countries (Bataineh, 2008; Ministry of Higher Education & Scientific Research, 2017). Moreover, Jordan is not dissimilar to most other Middle Eastern countries that have an increasing demand for accountants with the appropriate skills and knowledge base that allow

them to effectively deal with high levels of fraud and corruption (Alkubaisi, 2016). Finally, considering the political stability in the region, Jordan has long been seen as a haven for investment, tourism, and education when compared to the remainder of the tumultuous Middle East.

Although this research is not a comparative study, as part of the process of developing a forensic accounting programme for Jordan, it does involve thorough analysis of forensic accounting curricula in developed countries. For the purpose of this research, the participants are academic and professional experts who are involved in areas related to forensic accounting education in both the public and private sectors in Jordan. In addition to the Jordanian participants a limited number of Jordanian participants from outside the country also took part in the study. The diversity in the participation base is an important factor in achieving results that satisfy a wide range of forensic accounting education, and services stakeholders (Central Intelligence Agency USA, 2013; Sharp, 2013).

1.6 Layout of the Thesis

The thesis is composed of nine chapters as follows:

Chapter 1: Introduction

The first chapter provides an overview of the background knowledge in the topic under study and how this research was approach. This overview is followed by a review of the motivations for undertaking this research, its main predicted outcomes, and a brief overview of the methodology and methods developed to address the research problem. Finally, an outline of the thesis structure is presented.

Chapter 2: The Jordanian Political, Economic, Social, and Cultural Context

The second chapter provides an overview of Jordan's political, economic, educational, social, and cultural background. The chapter begins with a brief history of Jordan. It then reviews the particular cultural and contextual characteristics of Jordan which were deemed relevant to the research. This chapter also provides a context for the reader with regard to higher education and accounting and forensic accounting education in Jordan.

Chapter 3: Theoretical Framework

Chapter 3 identifies the set of theoretical approaches utilised in this research. The chapter lays out relevant theories, namely stakeholder theory and the Islamic theory of education which guide the practical aspects of this research. These theories also aided the formulation of the research questions and contributed to the discussion of the findings and the writing of the conclusions.

Chapter 4: Literature Review

This chapter begins with a review of literature concerning the landscape of forensic accounting in relation to fraud. It then reviews the literature relating to the forensic accounting profession and presents a comprehensive definition of ‘forensic accounting’ which is then adopted for the purpose of this research. This chapter also provides a summary of literature relating to forensic accounting education; this summary includes an overview of the importance and relevance of forensic accounting education as well as the perception of academics and practitioners regarding the content and delivery of forensic accounting education. This overview is then followed by an exploration of how culture may influence public perception and attitudes toward forensic accounting. Finally, the review of the literature identifies its gaps and limitations and, thus, frames the study’s research aim and questions.

Chapter 5: Research Methodology and Method

Chapter 5 is divided into two main parts. The first demonstrates the philosophical stance of the research and the research paradigm. That is, this thesis adopts the social constructionist’s understanding of reality, the pragmatic paradigm, and a qualitative method approach in conducting the research. The second section outlines the techniques that used in this research to gather and analyse data; primarily interviews and document analysis.

Chapter 6: Findings on Research Questions 1: Incentives and Barriers Surrounding Forensic Accounting Education in Jordan

This chapter begins by exploring participants’ familiarity with, and understanding of, the term forensic accounting. This exploration is followed by first presentation and then discussion of participants’ opinions and expectations regarding the

importance, the advantages, the barriers and the challenges to teaching forensic accounting in Jordan and proffers the study participants' suggestions for potential solutions. The chapter also indicates how results reached through this discussion were then used to form the basis for the next stage of the research.

Chapter 7: Findings on Research Questions 2: Reforms Necessary to Develop Forensic Accounting Practice and Education in Jordan

Chapter 7 explores necessary reforms and particular requirements that should be taken into account in relation to forensic accounting practice and education in Jordan by considering the country's, political and economic situation, its legislative, organisational, and professional context, and the nation's religious and cultural requirements.

Chapter 8: Findings on Research Questions 3: A Framework for Forensic Accounting Education

The eighth chapter provides a discussion on the framework that to be developed in light of the research findings. This chapter specifically aims to outline the level of offering and the major objectives of forensic accounting education; the organisation and the scope of content and teaching strategies; the assessment methods for a forensic accounting education programme; and, the interviewees' suggestions on the curriculum and on staffing development.

Chapter 9: Discussion, Conclusion, and Future Research

The final chapter, chapter 9, summarises the findings and discussions presented in chapters 6, 7, and 8. The chapter also discusses the implications of the research findings. Suggestions for further research opportunities conclude the chapter.

Chapter 2

The Jordanian Historical, Political, Social, Cultural, Economic, and Educational Context

2.1 Introduction

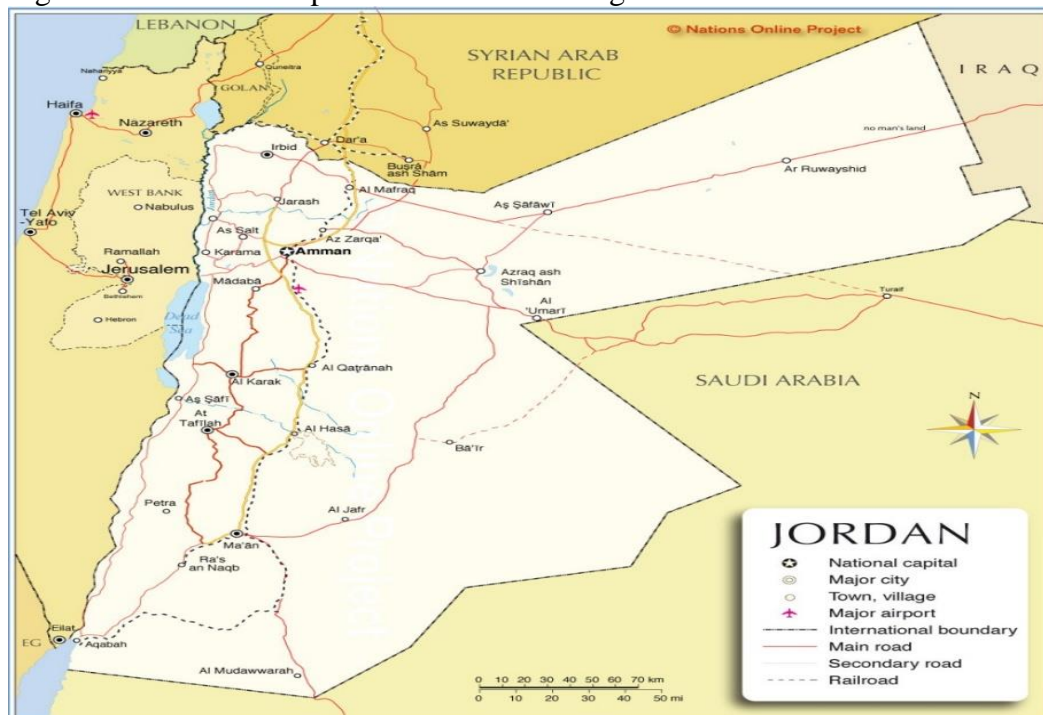
As the focus of this thesis is Jordan it is essential to contextualise the study in order to understand the Jordanian context. This chapter provides that context by offering insights into Jordan's historical, political, economic, social, and cultural background. The chapter's brief and descriptive sociopolitical and cultural background sets the stage for this study's exploration of the particular requirements in relation to forensic accounting practice and education in Jordan. As the focus of the thesis is the development of a framework for forensic accounting tertiary education, an understanding of tertiary education in Jordan is imperative. Hence, this chapter also provides an overview of higher education in Jordan in terms of supply and demand in the higher education market, the admission policies and criteria for Jordanian universities, and their graduation requirements. Finally, this chapter demonstrates accounting and forensic accounting education opportunities and challenges in the context of Jordan.

2.2 Historical, Political, and Demographic Background

Jordan is an Arab country of Southwest Asia situated at the crossroads of three continents: Asia, Africa, and Europe. Jordan occupies a strategic geopolitical location in the heart of the Middle East and the Arab World (see Figure 2.1). It borders the Arab oil rich countries of Saudi Arabia to the south and Iraq to the east (Abu Shanab, 2005; Batarseh, 2011). Al-Aqaba, the coastal city situated at the north eastern tip of the Red Sea, ' is a vital commercial and tourist centre (Aljazeera Net, 2011).

The term Hashemite refers to the Al Hashim family, the royal house of Jordan² (Office of King Hussein I, 2013). Between 1516 and 1918 Jordan was part of the Ottoman Empire (the Turkish Empire) and belonged to the Vilayet of Syria, also known as ‘the Levant’ (Culcasi, 2014). After World War I, Turkish rule in Jordan, known at that period as Transjordan, was replaced by British rule. The British mandate over Palestine and Transjordan was confirmed by the League of Nations in July 1922 (Abu Nuwar, 2006). This mandate gave the British a free hand in administering the territory (Britannica Online Encyclopedia, 2013). The formal objective of the mandate was to administer parts of the defunct Ottoman Empire until such time as these areas were able to manage their own affairs (Jerusalem Center for Public Affairs, 2012). The mandate document formalised the division of the area on both sides of the Jordan River as follows: territory to the west of the river became a national home for the Jewish people under direct British rule, and the land to east of the river became an Emirate, under semiautonomous Britain administration, under the rule of the Hashemite family (Grief, 2008).

Figure 2.1: Political map of the Hashemite Kingdom of Jordan



Source: Nationsonline (2017).

² This way of naming a country is also evident in the naming of the Kingdom of Saudi Arabia, which derives its name “Saudi” from the name of the ruling family, “Al Saud” (The Library of Congress, 1989).

In 1922, the British appointed Prince Abdullah Bin Al-Husain, one of the principal Arab figures in the war against the Ottoman Empire during World War I (The Library of Congress, 1989), as the ruler of the Transjordan territory (Malkawi, 2006). The mandate for Transjordan ended on May 1946, and the area gained its independence. At the end of the mandate, Prince Abdullah was designated King, and the country was named The Hashemite Kingdom of Jordan (The Library of Congress, 1989; Jordan Chamber of Commerce, 2013).

After the 1948 Arab-Israeli War, more than 700,000 Palestinians were expelled from or fled their homes to neighbouring countries from the area which became Israel; 100,000 of these refugees sought refuge in Jordan (The United Nations Relief and Works Agency for Palestine Refugees in the Near East (UNRWA), 2013). The Jordanian army entered the area of central Palestine that the Israeli forces were unable to occupy, claimed the West Bank as part of the kingdom, and initiated the process of legally integrating the West Bank into the Jordanian Kingdom (Jadaliyya, 2013). In accordance with this process, the Jordanian Citizenship Law was amended, so all Palestinians who were displaced to Jordan, or who remained in the areas controlled by Jordan west of the Jordan River (the West Bank), became full Jordanian citizens (UNRWA, 2012; Jadaliyya, 2013; Qalqili, 2013).

In the 1967 Third Arab-Israeli War³, Jordan lost the West Bank to Israel. Between 400,000 and 450,000 Palestinians were displaced from the West Bank and Gaza Strip, up to 95 per cent of whom sought refuge in Jordan (Badil Resource Center, 2010). Jordan hosts the largest share of the Palestinian registered refugees of all of the UNRWA sites. In 2012, 2 million registered Palestinian refugees lived in Jordan, with 10 recognised Palestine refugee camps accommodating around 18 per cent of them (UNRWA, 2012). Figure 2.2 shows a photo of a Palestinian refugee camp in Jordan.

³ The third Arab-Israeli War was fought in 1967 between Israel and the neighbouring countries of Egypt, Jordan, and Syria (Badil Resource Center, 2010).

Figure 2.2: One of the alleys of the Gaza Palestinian Refugee Camp in Jerash—Jordan



Source: “flickr.com,” by O. Chatriwala (2011)

In 1994, King Hussein signed a peace treaty with Israel. This made Jordan the second Arab country after Egypt to normalise relations with Israel (Elazar, 2013). Following this agreement, the parties established a free trade zone and full diplomatic relations (Joffé, 2002). However, Jordan’s opposition parties and professional associations rejected the new trend in relations with Israel and led a movement dubbed ‘antinormalisation’ calling for the cutting of all political, commercial, and cultural ties with Israel (Kornbluth, 2002). This antinormalisation movement has gained momentum in the last two decades owing to a range of incidents that include the Palestinian uprising in 2000, the blockade of the Gaza Strip since 2007, Israel’s wars in Gaza in 2008, 2012, and 2014, and the ongoing expansion of Israeli settlements on privately-owned Palestinian land (Schulze, 2016).

There are extensive cultural, religious, linguistic, and kinship ties between the populations living east of the Jordan River, ‘the Hashemite Kingdom of Jordan’ and those living on the West Bank (Palestinian Center for Policy and Survey Research, 2013; Elazar, 2013). While there are no official figures for the number of Jordanians of Palestinian origin, a number of sources suggest that they make up more than 50 per cent of Jordan’s population (Human Rights Watch, 2010a; Massad, 2008; Alabed, 2004). This situation has created many social and political issues and

continues to cause tensions (Alabed, 2004). These problems exploded in the civil war of 1970, known as ‘Black September’ (Aljazeera, 2009). After the civil war, the strained relationship between Trans-Jordanians and Palestinian Jordanians became more obvious. Differences in accents, dress and some social customs between Transjordanians and Palestinian Jordanians were redefined as national markers (Alabed, 2004). In addition, continuous discriminatory practices by many governmental and private agencies in education, cultural policies, and employment contributed to escalating the tensions between Transjordanians and Palestinian Jordanians (Sharp, 2013; Ryan, 2010).

King Hussein ruled Jordan for more than 46 years; following his death in 1999, his eldest son, King Abdullah II, assumed the throne (Goldberg & Satloff, 2000). In the wake of the Arab Revolution across the Middle East, King Abdullah II highlighted the need for political and economic reform (The Wall Street Journal, 2011). However, his rhetoric was not matched by concrete actions (Sharp, 2013). This failure to act led to youth protests in downtown Amman (see Figure 2.3), Jordan’s capital city, in tribal areas and in Jordan’s provinces; Jordanians continue to press for further economic reforms and political liberalisation (Sharp, 2013; Central Intelligence Agency USA, 2013).

Figure 2.3: Antigovernment protests in Jordan’s capital Amman in January 2014 demanding political reform and for corrupt officials to stand trial



Source: Taken from a posting on facebook.com by F. Khalifeh (2014a).

In an attempt to manage the fallout from the youth protests, King Abdullah changed his Prime Ministers four times in 2 years and designed a new anticorruption strategy. As part of this new strategy, several major corruption cases were pursued by the Jordan Anticorruption Commission (JACC). Between 2011 and 2013, a number of influential Jordanian figures including parliamentarians, ministers, former prime ministers, military and intelligence officers, and even members of the royal family, were accused, and some were convicted, in major fraud and corruption cases. In June 2013, the King's uncle was fined approximately US\$400 million and sentenced to 37 years of hard labour following charges of illegally profiting by using his position as CEO in the Jordan Phosphate Mines Company (JPMC)⁴.

Another case which witnessed enormous media attention was the trial of the former Intelligence Chief Muhammed Dahabi, one of the country's most influential officials. Dahabi was fined nearly US\$30 million and sentenced to 13 years for charges that included embezzling public funds, money laundering, and abuse of office (El-Shamayleh, 2012). Maward, Jordan's largest real estate company, was also under investigation by the JACC for corruption in 2011 (Ammon News, 2011). Fraud and corruption in Jordan are not confined to the public sector. Appendix 1 presents a number of major private and public sector corruption and fraud cases investigated by the JACC in 2011 and 2012.

2.3 Religion, Culture, and Role of Women in Jordan

The state religion of Jordan is Islam (The Constitution of The Hashemite Kingdom of Jordan, 1952). The constitution also states that there shall be no discrimination in citizens' rights and duties on grounds of religion. The majority of Jordanians are Muslim; about 95 per cent are Sunni Muslim, about 4 per cent are Christian, and the remaining 1 per cent represent other religions (U.S. Department Of State, 2005). In general, there is a strong loyalty to Islam among the Middle East's populations (Faksh, 1997). Similarly, in Jordan most people try to give the impression that they have fulfilled their religious duties and show adherence to the five pillars of Islam (Chrisp, 1991). These pillars are mentioned in several verses in the Holy Qur'an

⁴ Jordan Phosphate Mines Company (JPMC) is a public Jordanian company that was founded in 1949 and its stock is listed on the Amman Stock Exchange (Cable News Network (CNN), 2013).

(the revelation) and Sunnah (sayings of, and reports about, the Prophet Muhammad). Prophet Muhammad (peace be upon him) (PBUH) said:

Islam has been built on five [pillars]: testifying that there is no deity worthy of worship except Allah⁵ and that Muhammad is the Messenger of Allah, establishing the Salaah (prayer), paying the Zakah (obligatory charity), making the Hajj (pilgrimage) to the House, and fasting in Ramadan. (Al-Bukhari, Vol. 1, p. 17)

On Fridays, Muslims gather in the early afternoon for a sermon followed by a congregational prayer. Typically, businesses in Jordan take a break during Friday's prayer time and commercial stores close. It is also not uncommon to see worshipers spill out into the streets, temporarily halting traffic, to pray in front of mosques, as shown in Figure 2.4.

Figure 2.4: Friday prayers spill out to the streets near Al-Husseini Mosque in downtown Amman—Jordan



Source: "facebook.com" posted by F. Khalifeh (2014b)

Jordanian society is heavily influenced by the Arab Islamic culture that emphasises collectivism or 'familistic' values such as unity and group loyalty (Coon & Mitterer, 2015), whether that is a family, a tribe or a geographic community. Jordanians pay significant attention to building and maintaining family and community networks

⁵ Allah is the same word that Arabic-speaking Christians and Jews use for God, the God of Abraham.

and displaying group cohesion and loyalty (Eilon & Alon, 2007). In return for loyalty, members of a group expect sponsorship and protection (Budhwar & Mellahi, 2016).

While collectivism has positive connotations of cooperation, networking, and binding individuals together for the wellbeing of the whole community, it also has negative connotations of corruption and *wasta* (Ramady, 2015). Despite being incompatible with the foundations of Islam that forbid favouritism and nepotism (Abuznaid, 2009), *wasta*, which means clout or patronage, is strongly embedded in the fabric of Jordanian society (Budhwar & Mellahi, 2016). *Wasta* involves the intercession by a patron to gain favourable treatment or to achieve undeserved gains such as a job, a tax reduction, a driver's licence, or admission to a competitive university programme. *Wasta* often does not involve bribery, but rather it employs connection and social commitments among group members to gain advantage (Ramady, 2015).

The concept of social honour and reputation (*al suma'a wal-sharaf*) is another central element of Jordanian culture and social structure (Wunderle, 2008). For Jordanians, social honour and reputation derive from a range of aspects that include: showing hospitality and generosity (Shryock, 2004); achieving success through obtaining a higher degree (Sayeh, 2017); securing a good professional or government job (Ibrahim & Sherif, 2008); building wealth (Shryock, 2004); and avoiding prohibited behaviour such as having sexual relationships outside marriage, drinking alcohol, or gambling (Arnett, 2006). While these might appear to be positive aspects, their achievement could also exert immense family and community pressures on individuals to pursue unethical practices to meet the group's expectations (Wunderle, 2008). Hence, the influence of the concepts of 'honour and reputation' in Jordan might help to explain the widespread corruption and unethical practices in the country (Alkailani, Azzam, & Athamneh, 2012).

Islam originated in the Arab region where the tribal culture deprived women of many rights such as inheritance, marriage, and education. In defiance of the norms prevailing in that era, Islam emphasised women's rights in detail, including the right to education (Abdel-Fattah, 2006). In several places, the context of the Qur'an and

the Sunnah (e.g., Qur'an, 58:11; Qur'an, 39:9; Al-Bukhari, Vol. 3, p. 97) reminds believers that the application of science and knowledge is binding for every man and woman, and they both have an equal right to receive an education (Al-Hariri, 1987; Khan & Sheikh, 2012). In the early Islamic community, hundreds of women scholars, such as Aisha, the Prophet Muhammad's wife, had a major role in teaching the Qur'an, jurisprudence [*fiqh*], Arab history [*tareekh al-Arab*], and genealogy [*al-ansaab*] (Sanasarian, 2009). Nevertheless, the confusion between religious values and cultural practices is still one of the main reasons for the low rates of education of females in most Muslim countries (Al-Hariri, 1987; Ross, 2008).

Jordan's cultural landscape is rapidly changing. Alongside Islamic faith and Arabic traditions, many Western elements have also taken root in the country (Patai, 2015) thanks, in part, to the British mandate (Maffi, 2009) and the Jordanian pro-Western monarchy (Ryan, 2002). Although Arabic is the official language in Jordan, English is widely spoken, particularly in educational institutions and the business arena (Budhwar & Mellahi, 2016). The Western influence on the Jordanian culture is also evident in dress, music, and Western-brand restaurants, cafes, and stores which are important elements in Jordan's urban life (Patai, 2015), particularly in the capital, Amman.

Political and educational change in Jordan is impacting its culture, especially with respect to women. In 2013, the female proportion in the largest Jordanian university, the University of Jordan (which has about 39,000 students), amounted to around 65 per cent (Petra, 2013). Unfortunately, this change in education has not been accompanied by a change in women's labour participation. The growing educational attainment levels by women in Jordan highlight another serious issue, which is the high rates of female unemployment (64.4 per cent compared with 14.9 per cent for men in 2012), and, consequently, the waste of resources invested in women's education (Malkawi, 2013; Majcher-Teleon & Ben Slimène, 2009).

Economic hardship in Jordan has forced social change. The financial pressures on young families push more women to obtain jobs, although people still view men as the breadwinners and women as housewives (Morimoto & Michek, 2012). In order to enhance women's economic independence and participation in society, several

nongovernmental organisations provide training programmes and financial support for women. Examples of these organisations are the Queen Alia Fund for Social Development, the General Federation of Jordanian Women, the National Assistance Fund, and the National Employment Fund (Shatanawi, Naber, Al-Smad, & Al-Shneika, 2007).

Despite the fact that women in Jordan are becoming more involved in business and education (Mehra, Feldstein, & Abu Ghazaleh, 1997), it is considered unacceptable for them to pursue careers in the manual trades such as construction and carpentry. In addition, other cultural considerations confine the interaction between men and women to certain narrow limits (Vitell, Nwachukwu, & Barnes, 1993). For example, it is not acceptable for a male to touch, talk in private with, maintain eye contact with female or even shake hands with a female unless she initiates the handshake.

2.4 Economic Background

Jordan's population in 2016 totalled 7.7 million and has grown at a rate of 3.1 per cent per year (United Nations Statistics Division, 2016). Jordan's economy is among the smallest in the Middle East (Bataineh, 2008). Unlike many other Arab states, Jordan has no oil and is economically dependent on its rare natural resources of phosphates, potash and fertiliser derivatives, foreign aid, and tourism (Department of Statistics-Jordan, 2013). In addition, taxation is one of the most important sources of revenue for Jordan, typically accounting for a third of total domestic revenue on average. Jordan also is one of the most water-stressed countries in the world (International Monetary Fund, 2013).

Jordan is classified by the World Bank (2012) as an 'upper middle-income country'. In 2012, the gross domestic product (GDP) per capita was US\$5,461, the debt per capita was US\$3,766, and the deficit to GDP ratio was -8.83 per cent. A high level of poverty, inflation, unemployment, large budget deficit, and the influx of refugees from Iraq and Syria have made the government reliant on foreign assistance (Central Intelligence Agency USA, 2013). Despite the growing instability in the Middle East, the United States still perceives Jordan as its most reliable partner in

the region (Sharp, 2013; Jordan Embassy in Washington D.C., 2013; International Monetary Fund, 2013). Jordan has received more than US\$13 billion in US aid since the establishment of diplomatic relations between the two countries 6 decades ago (The Embassy of Jordan-Washington, D.C., 2013).

According to the World Bank (2013), Jordan's external debt amounted to 22 per cent of GDP in 2012 and is expected to stay at the same percentage under the most negative scenario. Public sector debt increased dramatically at the end of 2012 amounting to 80 per cent of GDP, up from 70 per cent of GDP at the end of 2011. The significant increase in the debt and the budget deficit are attributed largely to the decline of financial aid from the Gulf States and gas inflows from Egypt due to political conditions (International Monetary Fund, 2013; Rudoren, 2012).

The Arab Spring⁶ uprisings in the region negatively affected the remittances from Jordanian workers abroad, as well as investment inflows and tourism receipts, which constitute a large portion of the state revenues (Reuters, 2013). Since the beginning of the violent conflict in Syria in 2011, Jordan has witnessed a significant increase in the number of Syrian refugees. By October 2014, the total number of Syrian refugees registered with the United Nations High Commissioner for Refugees (UNHCR) in Jordan reached 618,508 individuals (The United Nations Refugee Agency, 2014). This influx of refugees has also increased the pressure on natural resources and on the country's health, education, transportation, and other infrastructure.

2.5 Overview of Higher Education in Jordan

Jordan is a leader among Arab countries in educational spending as a percentage of GDP (Index Mundi, 2013). Each year around 42,000 students pass high school with a score of 65 per cent, the minimum grade required for acceptance into a public

⁶ The Arab Spring refers to the "wave of pro-democracy protests and uprisings that took place in the Middle East and North Africa beginning in 2010 and 2011, challenging some of the region's entrenched authoritarian regimes. Demonstrators expressing political and economic grievances faced violent crackdowns by their countries' security forces" (Encyclopedia Britannica, 2017, para. 1).

university (The Board of Higher Education, 2016; Ministry of Higher Education & Scientific Research, 2017). In order to cover the increasing demand for higher education in Jordan, this sector has witnessed substantial development over the last 2 decades (Ministry of Higher Education & Scientific Research, 2017a), as is evidenced by the increasing number of institutions of higher education, students, and academic staff members (Bataineh, 2008; Seijaparova & Pellekaan, 2004).

Jordanians place a great deal of emphasis on higher education (Bataineh, 2008). A university degree is considered as an important aspect of an individual's social and professional status in Jordan (Sayeh, 2017). Jordan's 10 public, 20 private, and 2 regional universities (Ministry of Higher Education & Scientific Research, 2017) house more than 280,191 students, of whom 14 per cent are other Arab or foreign nationalities (Sayeh, 2017). These figures reflect a continuous growth and interest in the country's investment in education services and in promoting Jordan as a centre of higher education in the region (Ministry of Higher Education & Scientific Research, 2017a). Appendix 2 shows the numbers of faculty members and the undergraduate and postgraduate students in scientific and humanitarian faculties⁷ in a number of the leading Jordanian universities. It is expected that a programme in forensic accounting will most likely form a part of the faculties of humanities. The number of students in the humanities totals 144,370 out of the total of 254,690 tertiary students, indicating the significance of the humanities for Jordan.

Admission policies and criteria for Jordanian universities are determined by the Board of Higher Education (2016). After completing high school, prospective students interested in studying at public universities apply to a Centralised Admission Office that is linked to the Board of Higher Education. Application forms allow students to indicate 30 choices for their preferences in terms of universities and programmes. Entry to programmes is often competitive, and the high school certificate grade is the only entry criteria. The Centralised Admission Office reviews the entire application pool and determines the entry grade for each

⁷ Faculties in Jordanian universities are classified under two main categories, scientific and humanities faculties. Examples of scientific faculties are Medicine, Engineering and Technology, while Business, Law, Arts, and Education are considered as part of the humanities.

programme at each university, with entry grades varying from semester to semester (The Board of Higher Education, 2016).

However, members of the armed forces, the Ministry of Education, and staff at universities have certain quotas that allow their children to compete among themselves and to be admitted with lower grades when compared to those of their peers who are admitted under free competition. Students from rural areas may also receive preferential treatment for admission. In addition, public universities offer an alternative admission scheme, or Parallel Programme [*barnamij muwazi*] (The Board of Higher Education, 2016), that allows students to be admitted with relatively low grades but with considerably higher tuition fees. In general, students who are admitted under free competition [*tanaafus*] often account for fewer than half of all students admitted at public universities (The Education, Audiovisual and Culture Executive Agency (EACEA), 2012).

Private universities are able to determine the entry grades for the different programmes they administer, provided they adhere to the Board of Higher Education (2016) admission policy and criteria. Entry grades are always low at private universities when compared to those required by public universities; however, tuition fees are considerably higher (The Education, Audiovisual and Culture Executive Agency (EACEA), 2012).

At Jordanian universities, graduation requirements are defined in terms of credit hours (Fraij & Shihab, 2012). One credit hour is equivalent to 16 lecture hours (The Education, Audiovisual and Culture Executive Agency (EACEA), 2012). The structure of the curriculum in Jordanian universities is divided into three categories (Fraij & Shihab, 2012): first, courses that are required for all university students (university requirements) such as English language skills and computer skills; second, courses required for all students in the same college (faculty requirements) such as principles of accounting and fundamentals of management for business schools; and third, courses required for all students in the same department (departmental requirements) (The Education, Audiovisual and Culture Executive Agency (EACEA), 2012). Taking the above structure into consideration, each institution defines its own curriculum. The curriculum is first proposed and

discussed by the department concerned, then submitted to the relevant faculty council for further discussion. Finally, the proposed curriculum is submitted to the Deans' Council for approval (Fraij & Shihab, 2012).

The higher education system in Jordan follows the three-cycle 'bachelor, master and doctorate' structure (The Education, Audiovisual and Culture Executive Agency (EACEA), 2012). The bachelor's degree [*Darajat al-Bakalorius*] requires from 4 to 6 years of full-time study, depending upon the study programme. For example, a bachelor's degree in medicine requires 6 years, while bachelor's degrees in dentistry, pharmacy, and engineering require 5 years. Other undergraduate programmes such as commerce and business administration; social and behavioural sciences; law and computer sciences, require 4 years of study (Fraij & Shihab, 2012). The master's degree [*Darajat al-Majestair*] requires on average of 2 years of study. Students have an option in some universities to obtain a master's degree under either the thesis plan or the comprehensive examination plan (Fraij & Shihab, 2012). Doctorate degrees [*Darajat al-Doctorah*] are offered in a limited number of specialisations and at a few universities (The Education, Audiovisual and Culture Executive Agency (EACEA), 2012).

In 2010, the Ministry of Higher Education and Scientific Research advised students not to enrol in 116 postgraduate specialisations in Jordanian public universities (Higher Education Accreditation Commission, 2015). The Ministry announced that these academic programmes were no longer to be accredited by the Ministry due to their failure to meet the higher education accreditation standards (Ministry of Higher Education & Scientific Research, 2017). This decision raised questions and concerns about the future of higher education in Jordan (Bataineh, 2008).

Most higher education institutions in Jordan have their own conceptual framework that includes philosophical and methodological principles to guide their teaching programmes and help design their curricula. Nevertheless, according to Khader (2009), these principles are usually not reflected in the curricula design which distinguishes graduates of one institution from another. For example, a strategic goal for Yarmouk University is to conduct a periodic review of curricula and study plans to keep abreast of international advancements and technology developments.

However, the department of accounting still has basically the same study plans, course content, and classes it had 20 years ago (Yarmouk University, 2018).

To conclude, although there are significant points of strength that need to be preserved in the higher education system in Jordan, systematic reforms should be carried out; moreover, some practices need to be discarded and others need to be instituted (Khader, 2009).

2.6 Accounting and Forensic Accounting Education in Jordan

According to the International Accounting Education Standards Board (IAESB), the purpose of accounting education is “to produce competent professional accountants capable of making a positive contribution over their lifetimes to the profession and society in which they work” (Saville, 2007, p. 107). However, Low, Samkin, and Liu (2013) suggest that “the purpose of accounting education has always been difficult to specify as it changes accordingly to global business environments, the requirements set by the accounting professions, and the ever-increasing demand for accountants” (p. 2). Low et al. (2013) also argue that, in order to meet the purpose of accounting education, accountants today must not only obtain technical skills, but must also broaden their knowledge to include soft skills such as the ability to adapt to changes, coordinate, communicate, and work with people from different cultures and backgrounds.

Beyond broadening students’ soft skills, Sikka, Haslam, Kyriacou, and Agrizzi (2007) assert that accounting education must be “devoted to producing reflective accountants through educational processes focussing on sound education principles, ethics, professional scepticism, lifelong learning opportunities, distinguishing between private and public interest and serving the public interest” (p. 3). Similarly, Samkin and Stainbank (2016) indicate that accounting education should prepare graduates to better understand the effects that accounting has on society, wellbeing, and sustainability. Samkin and Stainbank (2016), however, explain that accounting education in developing countries is becoming irrelevant and out-of-date with its emphasis on technical and instrumental aspects of accounting while overlooking

the accounting education and profession connection with the political and social world.

The solution to the accounting practice and education issues and the way in which that solution is delivered in one country may differ from that for another (Engelmann, 1962; Baydoun & Willett, 1995). According to Askary (2006), the interactions of the cultural environment elements such as language, religion, attitudes, morals, values, law, education, politics, technology, and material culture on accounting are expected to be extremely complex. Hence, in every country, business schools need to take this complexity into account when developing their curricula (Pok, 1995).

The analysis of the inputs, process, and outcomes of higher education in Jordan highlights one main issue: the irrelevance of the accounting curricula to the business environment of Jordan (The World Bank, 2009; Khader, 2009). This issue will be discussed by reviewing the accounting curricula in the two largest universities in Jordan, namely the University of Jordan and Yarmouk University. These two universities have around 30 per cent of the university students in Jordan (Fraij & Shihab, 2012).

All universities in Jordan need to follow a curriculum framework imposed by the Higher Education Accreditation Commission (HEAC) (2015) (the accounting curriculum framework imposed by the HEAC is shown in Appendix 3). The accounting curriculum framework requires 132 credit hours as follows: first, 27 credit hours of university requirements; second, 24 hours of faculty requirements; and, third, 81 hours of department requirements (the accounting syllabus at Yarmouk University is shown in Appendix 4) (The Higher Education Accreditation Commission (HEAC), 2015). This framework means that about 20 per cent of the accounting curricula (27 credit hours of university requirements) is allocated to nonaccounting general subjects such as Arabic language, military sciences, and national education.

Higher education in developing countries is not a guarantee of employment (Alia, 2014; Assaad, Krafft, & Salehi-Isfahani, 2018). The situation in Jordan is no

exception to this rule. The unemployment rate among university graduates in Jordan is higher than that for individuals with a lower level of education (The Euro-Mediterranean Youth Platform (EUPA), 2010). Most research attributes this low rate to the irrelevance of the Jordanian higher education system, which results in a gap between the education that students receive and the skills that industry requires (Botes & Sharma, 2017; Khader, 2009; Hawkins, Ruddy, & Ardah, 2012).

The need for more relevant and feasible business and accounting curricula in Jordan has been highlighted in several studies in the last 2 decades (e.g., Assaad, et al., 2018; Bataineh, 2008; Abu-Hola & Tareef, 2009; The World Bank, 2009; Batarseh, 2011). The findings of these studies revealed that the relevance of curricula to the business world is minimal. While there is a growing worldwide interest and ongoing move towards interactive and student-centred learning, accounting curricula in Jordanian universities (e.g., The University of Jordan, 2018; Yarmouk University, 2018) are too narrow and focused on examinations and achieving the right answer. Moreover, accounting courses are based entirely on lectures, with a minimal use of technology and real-world examples.

Most curricula used today in the departments of accounting in Jordanian universities (e.g., The University of Jordan, 2018; Yarmouk University, 2018) are in the main imported directly from developed countries, out-dated, and no longer in tune with current local realities. A review of textbooks used in teaching the department requirements at Yarmouk University shows that foreign (mainly American) books have been adopted as textbooks for 23 out of 27 courses (e.g., The University of Jordan, 2018; Yarmouk University, 2018). The use of English, and American textbooks, in higher education is seen by many institutions, students, and parents as a way to achieve greater access to up-to-date knowledge as well as a path to better employment opportunities (Sabbour, Dewedar, & Kandil, 2010). In addition, the lack of local resources and textbooks in the Arab world is another reason for the adopting of American universities' textbooks in higher education (Nusair, 2013).

However, many researchers reject these rationales describing such a policy as fallacious and calling for the Arabisation of higher education curricula through

encouraging books to be published in and translated into Arabic (Sabbour et al., 2010; Benkharafa, 2013; Nusair, 2013). Hamid (2009) argues that the over-reliance on American textbooks in the Jordanian universities gradually isolates some local subject matter experts from their contexts and societies, creating less locally appropriate education. It is expected that forensic accounting education in Jordan will be faced with similar challenges (that is, the lack of relevant forensic accounting textbooks and learning resources and the crowded curriculum that make it difficult to find room for new content), especially in light of being a new area in the accounting field and which still requires much research and development.

Forensic accounting research and education in Jordan is still in its infancy (Alkubaisi, 2016). A keyword search was performed on Google™ to identify Jordanian literature in the field of forensic accounting. As Google offers country-specific versions of the search engine, the facility allowed a search for the term ‘forensic accounting’ and the Arabic translation ‘*mohasabah jena’eyiah*’ in Jordan. The only criteria were that the exact term forensic accounting, or ‘*mohasabah jena’eyiah*’, in addition to the country name ‘Jordan’ appeared anywhere in the article. Wakefield (2008) identified journal articles as influential in contributing to the exchange of knowledge sharing, advancement of theories, and developing paradigms. To ensure that relevant articles were not excluded, an additional search for the term forensic accounting was conducted using Google Scholar™. The Google™ and Google Scholar™ search both found only one accredited journal article (Alkubaisi, 2016); two master’s theses, one of which is unpublished (Burghul, 2015; Qandeal, 2014), and two predatory journal articles (Matarneh, Moneim, & Al-Nimer, 2015; Shanikat & Khan, 2013).

In his study, Alkubaisi (2016, p. 25) portrays forensic accounting as a new area in the context of the Arab world, and in Jordan particularly, as follows:

Research in the area of forensic accounting is very weak in the Arab world; none of the [forensic accounting] stakeholders there make hardly any contribution, and there is even a lack of understanding of the term, the concept and the profession. While the role of the [forensic accounting] profession has expanded significantly in the developed world, and even in many developing countries, there are hardly any academic bodies, institutions or private or public organisations that

offer forensic accounting education or train qualified forensic accountants in Jordan [...]. The curricula in Jordan, and in the Arab region generally, include very little coverage of forensic-related topics, and mainly in relation to the forensic accountant role as an expert witness.

Alkubaisi (2016) asserts that there is a growing demand for forensic accounting services in Jordan. This demand is creating an opportunity for colleges, universities, and other educational institutions that choose to provide forensic-related courses and programmes (Alkubaisi, 2016). However, between them just two universities out of 31 (Ministry of Higher Education, 2010) are offering two elective courses related to forensic accounting⁸. Hence, business schools have to revisit and redevelop their curricula in the light of the country's requirements (Alkubaisi, 2016).

In addition to Jordanian universities, a number of oversight agencies and professional bodies in Jordan such as the Jordanian Association of Certified Public Accountants (JACPA, 2017) and the Audit Bureau (Assabeel, 2015) have been organising forensic accounting-related workshops in the last 5 years. This action indicates that the relevance of forensic accounting has been of growing interest to various stakeholders in Jordan, including government and professional bodies. Qandeal (2014) suggests that academic institutions and professional associations in Jordan should direct more efforts toward providing forensic accounting education and training programmes to enable forensic accountants to meet the Jordanian market expectations.

2.7 Summary

This chapter provided background and context information on Jordan by covering the demographic, political, historical, economic, religious and cultural construction of the country. Jordan is an Arab majority Muslim kingdom with a population of about 7.7 million. Jordan is a former British colony and an American ally with relative political stability in a region with multiple centres of instability and ongoing

⁸ The researcher used Google and Google Scholar's web search engines along with websites of Jordanian educational institutions and contacted a number of anticorruption agencies and accounting academics in Jordan in relation to this information.

complex conflicts. The demography of Jordan and the evolution of its political system and policies have always been dominated by relations, occasionally tense, with Israel, which have had significant economic, social, and cultural impacts (Wilson, 2005). Jordan is one of the top refugee-hosting countries with large numbers of forced migrants mainly from Palestine and Syria. These refugee crises have exacerbated economic and social challenges in Jordan.

Jordanian culture is heavily influenced by the Arab Islamic culture that emphasises the importance of unity and group honour and loyalty. While these values can have positive effects on society, they may also create pressure on individuals to engage in unethical behaviour in order to meet the group's expectations.

This chapter also provided an overview of higher education in Jordan with a focus on the admission policies and criteria for Jordanian universities. Despite limited financial and human resources in Jordan, higher education is one of the strategic priorities of the country because of the role it can play in promoting the economic and social wellbeing (Ministry of Higher Education & Scientific Research, 2017a). About 3.7 per cent of Jordan's total population is enrolled at university, a proportion that indicates a great and growing demand for higher education in the kingdom. Despite ranking among the best in the Middle East region, none of Jordan's 30 universities rank among the world's top 500 universities. Improving the worldwide ranking of Jordanian universities and meeting the country's higher education needs requires reforms that produce fair, competency-based admission policies and criteria.

Very little work has been done in the area of forensic accounting in Jordan and to date there has been no research in forensic accounting education. In addition, the coverage of forensic accounting topics in the Jordanian accounting curriculum is minimal. Jordanian universities, thus, are required to develop forensic accounting education programmes and to enhance coverage of forensic accounting in their accounting curricula and meet the future needs of the profession.

The following chapter outlines the theoretical framework of this study.

Chapter 3

Theoretical Framework

3.1 Introduction

Culture and ideology largely determine the community's view of life in general, and, specifically, its attitudes to science and education (Hofstede, 1980). Hence, researchers can draw from theoretical perspectives in respect to how cultural and ideological differences must be taken into account when developing a forensic accounting education programme. The first part of this chapter explores the diversity of theories relating to curriculum development, and focuses on the process of curriculum development, its requirements, and the nature of stakeholders' engagement in the process. The second part of this chapter casts light on the influence of Islam on Jordanians' attitudes. The focus here is on exploring the Islamic view of knowledge and education. This discussion provides an approach to explore the perceptions and expectations of higher education within a Jordanian context that is largely governed by the Islamic concept of knowledge and education. Finally, drawing from key Islamic texts, the third part of this chapter discusses key Islamic concepts and principles of relevance and delineates what they suggest for forensic accounting. Furthermore, the discussion in the second and third part of this chapter may be of help in answering questions about Jordanians' perceptions of forensic accounting education.

3.2 Stakeholder in Curriculum Development

A curriculum is considered the heart of education for two reasons. First, a curriculum provides a guidance for what should be taught. Second, it combines philosophy, purpose, and practice (Null, 2011). Beauchamp (1982) identifies two essential dimensions of curriculum development: the substantive dimension and the process dimension. The substantive dimension involves all of the potential options for the assortment of cultural content to be integrated into the curriculum, alternative methods of organising that cultural content, and other supporting data

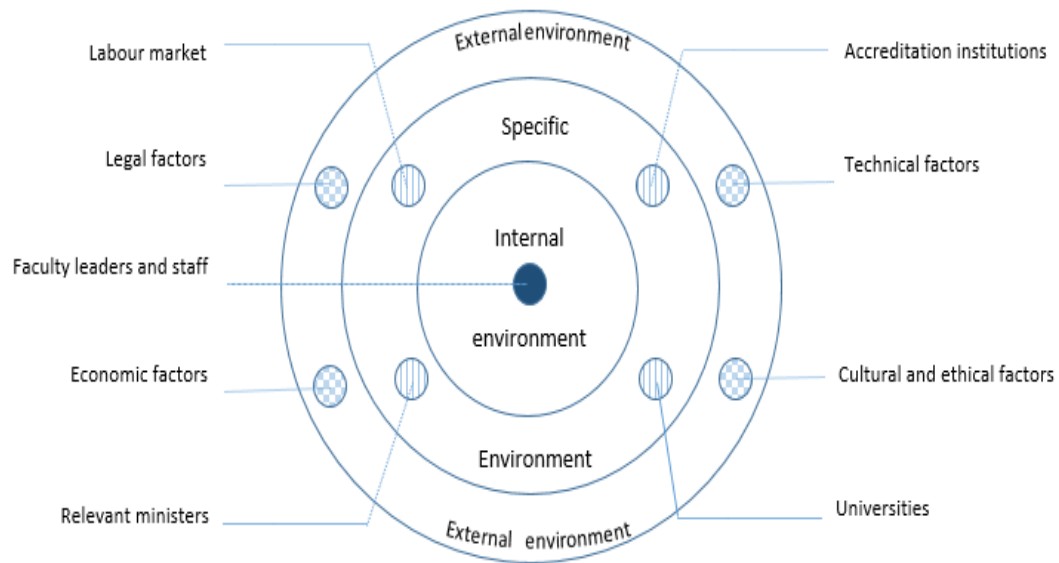
such as alternatives in goal statements. The process dimension involves the process of curriculum planning, implementation, and evaluation (Beauchamp, 1982). Makura and Makura (2012) and Richards (2001) argue that curriculum development is not just the interweaving of subjects and learning contents. Richards (2001) explains that

curriculum development refers to the range of planning and implementation processes involved in developing or renewing a curriculum. These processes focus on needs analysis, situational analysis, planning learning outcomes, course organisation, selecting and preparing teaching materials, providing for effective teaching, and evaluation. (p. 41)

Understanding the various stakeholders and their needs is the first task in the development of an effective curriculum (Heinfeldt & Wolf, 1998; Markus, 2014; Meyer & Bushney, 2008; Taba, 1962; Wood, 2010). A successful curriculum design embraces careful considerations of philosophical, psychological, and contextual issues. Research asserts that, without embracing careful considerations of these three fundamental principles, the designed curriculum may fail to meet the stakeholders' needs (Markus, 2014; Pinar, 2011; Taba, 1962).

Education providers and curriculum developers have to deal with a range of stakeholders. According to Markus (2014), it is possible to classify stakeholders in curriculum development under three categories: first, the internal environment, which includes faculty leaders, staff, and current and potential students; second, the specific environment, which includes labour market, relevant ministers, accreditation institutions, and universities as competitors or possible partners; third, the external environment, which includes legal, economic, technical, social, cultural, and ethical factors. Figure 3.1 delineates a number of groups that have an interest in and may seek to exert their influence over tertiary curricula.

Figure 3.1: The three categories of stakeholders in curriculum development



Source: Author

The influence of the stakeholder concept is apparent within accounting education (e.g., Kramer et al., 2017; Stout & West, 2004; Stout, Borden, German, & Monahan, 2004). In their comprehensive assessment of accounting education⁹, Albrecht and Sack (2000) highlighted the critical need for reforming accounting education through the development of innovative programmes that respond to stakeholder needs. Furthermore, a number of researchers (e.g., Botes, 2009; Wally-Dima, 2011; Devi, Kumar, & Raju, 2012) assert that, in order to avoid the gap between accounting education and practice, accounting education programmes must be developed on the basis of the needs of their stakeholders.

As an emerging field of research, forensic accounting continues to grow and develop, both in terms of practice and education. Much research has been conducted on stakeholder perspectives on fraud and forensic topics in the accounting curriculum (e.g., Kramer et al., 2017; Daniels et al., 2013; DiGabriele, 2007; Rezaee et al., 2004,; Rezaee et al., 1992). However, there has been relatively little

⁹ This is a study of the future of accounting education sponsored by the Institute of Management Accountants (IMA), the Association of International Certified Professional Accountants (AICPA), the American Accounting Association (AAA), and the Big 5. The aim of this study was to “write a high-level thought piece, supported by evidence where possible, about the future of accounting education”. The research methodology of this study consisted of: reviewing authoritative reports of the IMA, the AICPA and the AAA, interviewing business and accounting experts and practitioners, conducting focus-group sessions and circulating three questionnaire surveys (Albrecht & Sack, 2000).

work directed towards how stakeholders' needs for forensic accounting education vary within different political, economic, and cultural contexts (Askary, 2006; Trompeter et al., 2012). This study attempts to address the problem in one developing country, Jordan.

The fundamental question that this study seeks to address is: What is an appropriate framework for forensic accounting education that can contribute to the development of forensic accounting practice and education in Jordan? The challenge that presents itself is the development of a framework for forensic accounting education that responds to the growing complexities of the business environment and the market's higher standards in terms of the accountant's ability to deal with fraudulent activities (Imoniana, Antunes, & Formigoni, 2013; Rezaee et al., 2004), while placing forensic accounting education in the sociopolitical and cultural context of Jordan (Alkubaisi, 2016). In order to meet this challenge, a stakeholder-informed approach that takes into account the sociopolitical and cultural factors influencing forensic accounting education and practice in Jordan has been adopted.

A stakeholder-informed approach advocates consultation with the broad cross-section of groups/parties in the local society who are influenced by, and who can influence, the direction of forensic accounting education in Jordan (Stout & West, 2004; Wood, 2010). The rationale here is that this wider range of local stakeholders would represent the values and needs of the society, speak for the culture of the locals, and reveal the general attitude of Jordanians towards forensic accounting (Albrecht & Sack, 2000; Markus, 2014; Meyer & Bushney, 2008). Consultation with this wide range of stakeholders allows for better-informed forensic accounting curriculum decisions that respond to the interests and needs of the accounting industry and the wider society (Baker, 2016).

Assumptions about the world, society, and education lead to diverse understandings of the term curriculum (Taba, 1962). These assumptions are also responsible for forming an approach to curricula development upon which the nature of stakeholders' engagement in the process of curriculum development is identified. According to Phan (2015, p. 29), "an approach to curriculum development consists of both curriculum understanding and the curriculum development process". The

use of a stakeholder approach for the development of a framework for forensic accounting education, thus, requires a brief look at the definition of the term curriculum and curricula development models. The following two subsections provide a brief overview of the definition of the term curriculum and of curricula development models.

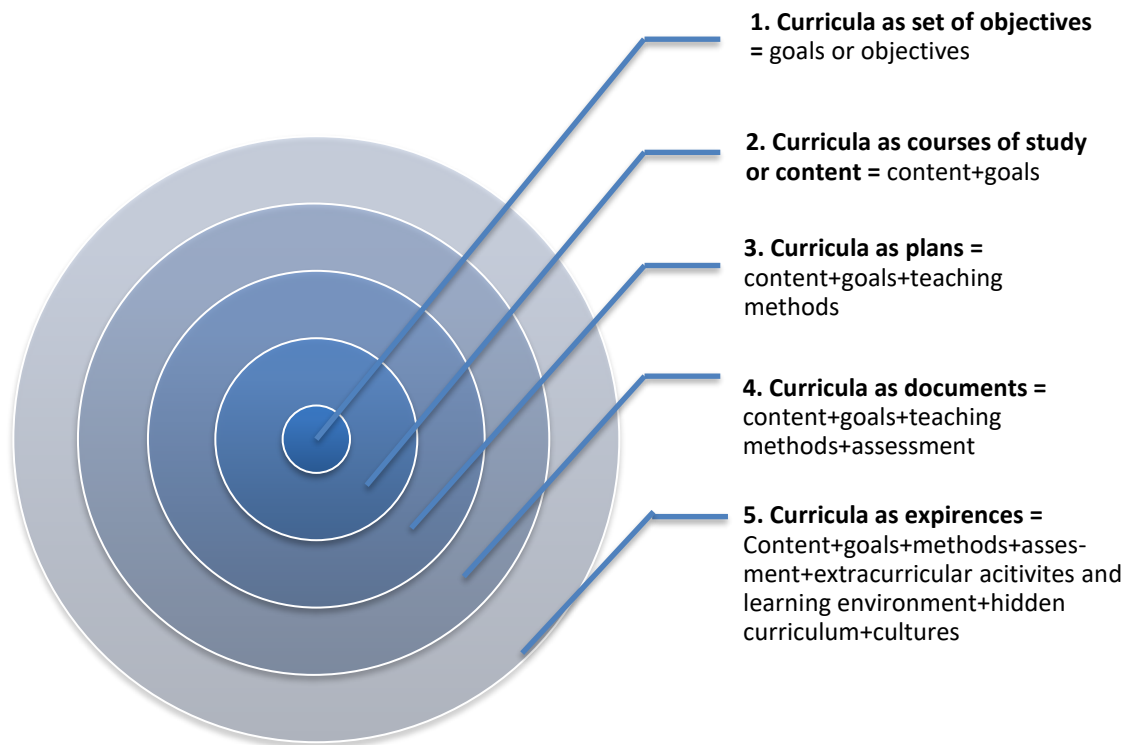
3.2.1 Defining curriculum.

In exploring the influence of the stakeholder concept in curricula development, it is first necessary to clarify what exactly the term ‘curriculum’ refers to. In Arabic, curriculum translates as *manhaj*, which can be interpreted literally as a pathway or a method (Almaany, 2018). In the context of education, the Lexicon of the Modern Arabic Language (Almaany, 2018, n.p.) defines *manhaj* (curriculum) as “a complete set of study requirements to earn a qualification”.

Curriculum has numerous definitions ranging from the traditional definition of the term as “a course of study” (Webster’s II New Riverside Dictionary, 1995, p. 104), at one end, to “all planned and unplanned learning experiences” (Glanz, 2003, p. 162) throughout life, at the other (Alvy, 2009; Kridel, 2010; Su, 1992; Taba, 1962). However, according to Su (2012), the majority of curriculum definitions contain four common elements. These common elements refer to: 1. goals or objectives of education; 2. content; 3. teaching methods; and, 4. assessment. Furthermore, Su (2012) argues that the definition of curriculum as ‘experiences’ is the broadest definition of all. Su (2012) explains that the curriculum elements in this definition encompass, in addition to the four common elements stated above, extracurricular activities, the learning environment, a hidden curriculum¹⁰, as well as cultures which colour educational experiences. Figure 3.2 helps to elaborate the meanings that Su (2012) gives to the term curriculum, by demonstrating, in varied breadth, the interrelationships between the definitions of the term.

¹⁰ Hidden curricula are “those unstated norms, values, and beliefs embedded in and transmitted to students through the underlying rules that structure the routines and social relationships in school and classroom” (Giroux, 2001, p. 47).

Figure 3.2: Concentric ring of conceptualisation of curriculum



Source: Adapted from Su (2012, p. 156).

According to Glatthorn (1987), two criteria should be met in order to produce a useful definition of curriculum. First, the definition should reflect the educators' common understanding of the term. Second, it should be useful to educators in achieving operational distinctions. Taking these two criteria and the interrelationship among curricula definitions as explained in Figure 3.2 into consideration, this research adopts Marsh's (2010) definition of curriculum as "an interrelated set of plans and experiences which a student completes under the guidance of the school" (p. 93).

3.2.2 Curriculum development models.

Many models of curriculum development have been proposed in the literature (see Table 3.1 below). When analysing curriculum development models, researchers focus on different features of these models including: assumptions about the world, society, morality, and the nature of knowledge (e.g., Pinar, 2011; Taba, 1962); understanding of curriculum and the purpose of a curriculum (e.g., Beauchamp,

1982; Eisner, 1991); and, the process of curriculum development (e.g., Fensham, 1988; Hungerford, Peyton, & Wilke, 1980). For the purpose of this study, dominant curriculum models are selected and reviewed and compared in order to specify two major features of these models, namely the process of curriculum development and its requirements and the influence of the stakeholder concept in these models. Table 3.1 provides a chronological description of a number of the dominant curricula development models that will be discussed in this section and summarises their propositions.

Table 3.1: A chronological description of dominant curricula development models

Researcher	Model	Propositions
Tyler (1949)	Behavioural	<ul style="list-style-type: none"> - A four-step process: stating objectives; selecting learning experiences; organising learning experiences; evaluating the objectives. - A linear procedure with a top-down approach. - Behavioural objectives, time on task, sequential learning, direct instruction, achievement testing, mastery in skills and content, and teacher accountability are essential concepts.
Taba (1962)	Interactive	<ul style="list-style-type: none"> - A further elaboration of Tyler's model in which curricula are composed of certain elements. - Five mutually interactive elements: objectives, content, learning experiences, teaching strategies, and evaluative measures. - Curriculum development requires moving beyond the consideration of the substantive elements to an examination of the complex interactions among stakeholders and the context in which the curriculum is developed.
Weinstein & Fantini (1970)	Humanistic	<ul style="list-style-type: none"> - Places the student as the key stakeholder: common characteristics and interests; concerns; through diagnosis, the teacher accordingly selects themes and topics. - Content vehicles: learners' life experiences, attitudes and feelings, and social context. - Learning skills: learning how to learn; teaching procedures: matching the learning styles; outcomes, including cognitive and affective objectives. - Teaching procedures match learning styles.

Saylor, Alexander, & Lewis (1981)	Administrative	<ul style="list-style-type: none"> - Curriculum plans in terms of the relations of ends and means, the attention to pertinent facts and data, and the flow of activities or procedures from beginning to end. - Goals and objectives influenced by different factors, followed by curriculum design, implementation, and evaluation. - Curriculum design involves decisions made by groups based on the collected data about the needs and expectations of stakeholders. - Curriculum implementation involves decisions regarding instructions, that is, how to select appropriate teaching strategies.
Eisner (1979, 1991)	Systemic Aesthetic	<ul style="list-style-type: none"> - A systematic and dimensional view of curriculum that combines behavioural principles with an aesthetic perspective. - Teaching is treated as an art which requires the level of scrutiny, assistance, and support that any performing art deserves. - Instructors are required to connect the curriculum to the changing external society. - The design of the curriculum includes attention to ideas that matter, skills that count, and the means through which students and programmes interact.
Reynolds (2001)	Reynolds's model	<ul style="list-style-type: none"> - The facets of the environment for syllabus development comprise sociopolitical, economic, and cultural factors as well as the prevailing educational ideology. - Any understanding of syllabus development should involve the environment in which it was developed.
Phan (2015)	Participatory	<ul style="list-style-type: none"> - Curriculum development is an ongoing and spiral process. - A six-stage process: information gathering; specifying learning outcomes; planning and piloting; implementing and adapting; reevaluating; and, replanning. - A preliminary stage that involves raising stakeholders' awareness about the proposed changes and curriculum development process should be conducted prior to implementing the six stages of the participatory model. - The participatory model aims to engage different stakeholders in sharing their expertise and views and enables their voices to be heard.

Source: Adapted from Phan (2015, p. 23)

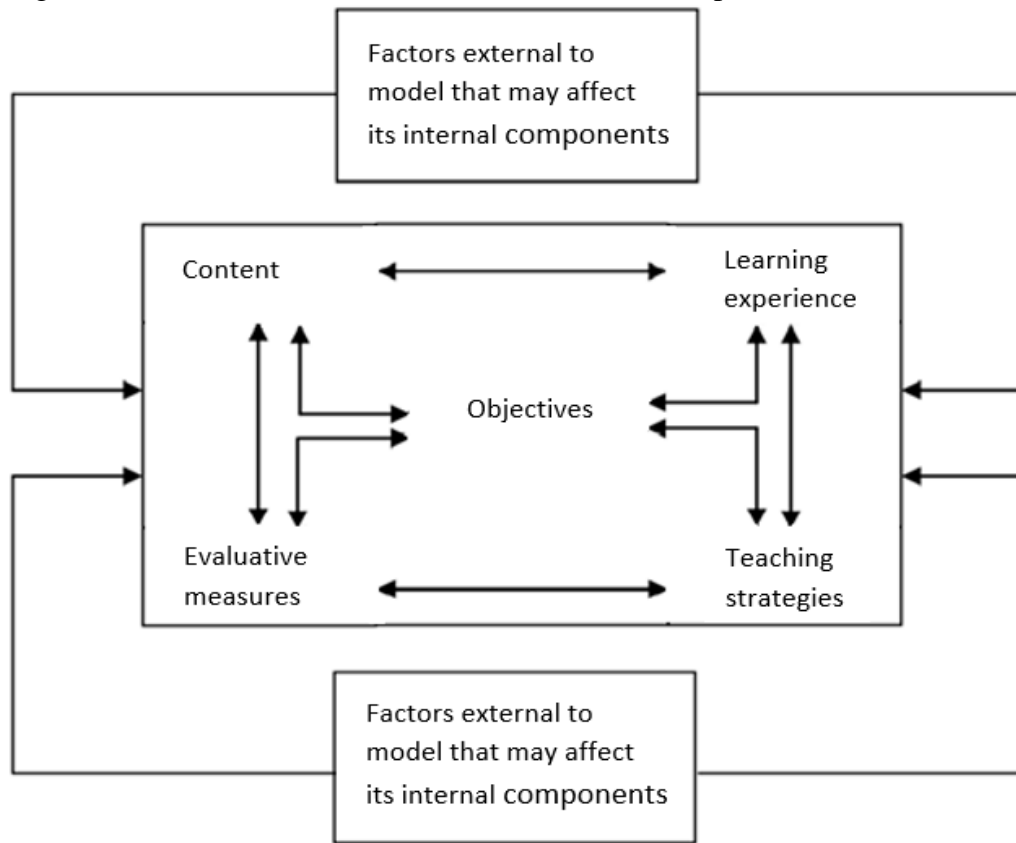
One of the most prominent curriculum development models is the classic model, also known as the prescriptive model, developed by Tyler (1949). Tyler suggests a linear and logical step-by-step model for curriculum development. In this model, curriculum development is undertaken hierarchically in a top-down manner. Senior and experienced academics make all the important curriculum decisions and less experienced academics, students, employers, and other stakeholders are almost entirely excluded (Phan, 2015).

Tyler's model revolves around four penetrating questions: 1. What educational purposes should the institution seek to attain through the desired objectives? 2. What educational experiences (instructions and contents) are likely to act as a means of attaining these objectives? 3. How can these educational experiences be structured effectively? and, 4. How can we assess the learning outcomes to determine whether the educational purposes are being attained? These four questions comprise a logical sequence of curriculum development and provide a clear direction for the whole process. However, Marsh (2008) argues that the steps in the model do not reflect actual practice, as curriculum development is rarely a simple linear process.

According to Levin and Kater (2012), several major curriculum development models build upon Tyler's classic model. One of these models is the interactive model, also known as the instructional strategies model (Taba, 1962). Taba's (1962) ideas on curriculum development theory can be considered as a further elaboration of Tyler's (1949) model in that they contribute a more pedagogical and practical character (Krull, 2003). In addition, Taba (1962) stresses that curriculum development requires moving beyond the consideration of the substantive elements to an examination of the complex interactions among stakeholders and the context in which the curriculum is developed.

Taba's interactive model emphasises the planning of instructional strategies as the basis of the curriculum design (Taba, 1962). This model includes five mutually interactive elements of the teaching and learning system, namely objectives, contents, learning experiences, teaching strategies, and evaluative measures. The interactive model is depicted in Figure 3.3.

Figure 3.3: The interactive model of curriculum development



Source: Adapted from Lunenburg (2011, p. 3).

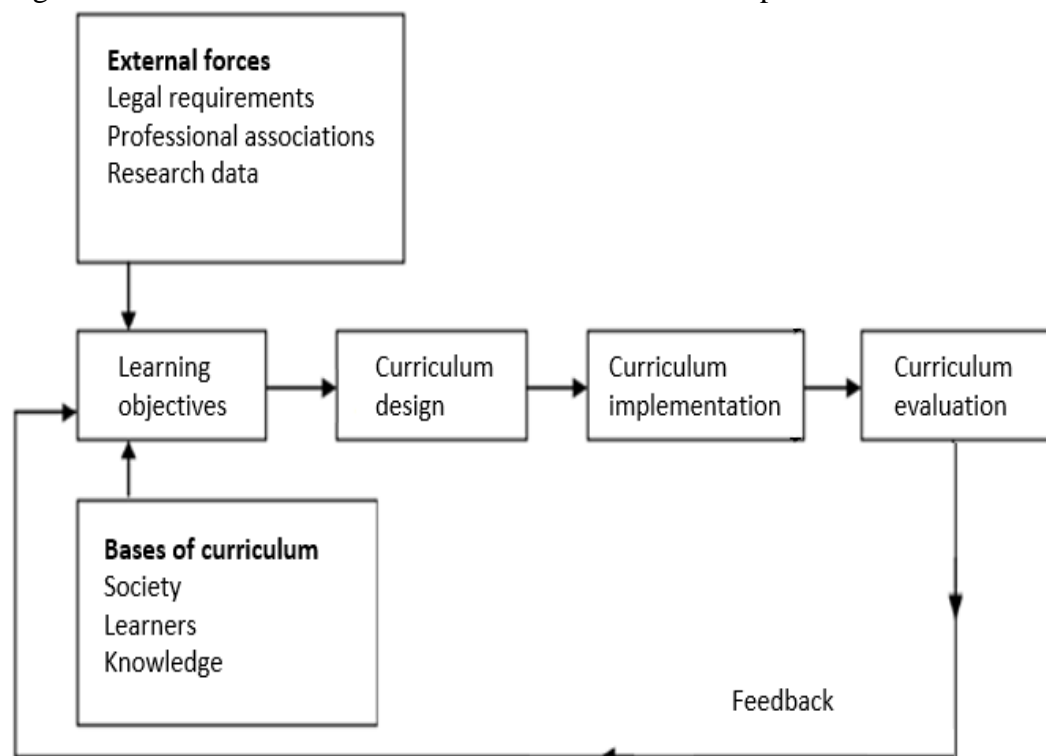
As shown in Figure 3.3, unlike in Tyler’s classic model, the relationship among the curriculum elements in Taba’s interactive model is seen to be interactive and progressively modifiable through a dynamic curriculum development process. For example, the addition of teaching strategies may necessitate further objectives and evaluative measures. Hence, the option to move to and fro amongst the curriculum elements in the interactive model may offer a more accurate reflection of reality than the classic model, where the elements comprise a fixed sequence, does (Brady & Kennedy, 2013).

Weinstein and Fantini (1970) propose a model known as the humanistic model, which, unlike the models presented above, links sociopsychological factors with cognition in an attempt to help learners to deal with their problems and concerns. Weinstein and Fantini (1970) place the student, as the key stakeholder, at the centre of curriculum development. This model, however, is concerned with the group, rather than with individuals, as most students are taught in groups (Pinar, 1978).

The primary requirement in this model is to identify the learners' demographic details as well as their concerns. Through diagnosis, teachers try to develop student-centred strategies for instruction and to organise contents around learners' concerns.

Saylor et al. (1981) adopt an administrative approach to curriculum development (see Figure 3.4). They highlight that curriculum development involves decisions made by the responsible curriculum planning group/s based on the collected data about the needs and expectations of stakeholders. Saylor et al. (1981) explain that the selection of educational objectives and, hence, the curriculum design, the implementation strategies, and the evaluation procedures are influenced by: 1. external forces such as legal requirements, professional associations, and state guidelines, and 2. bases of the curriculum which include society, learners, and knowledge.

Figure 3.4: The administrative model of curriculum development



Source: Adapted from Lunenburg (2011b, p. 6).

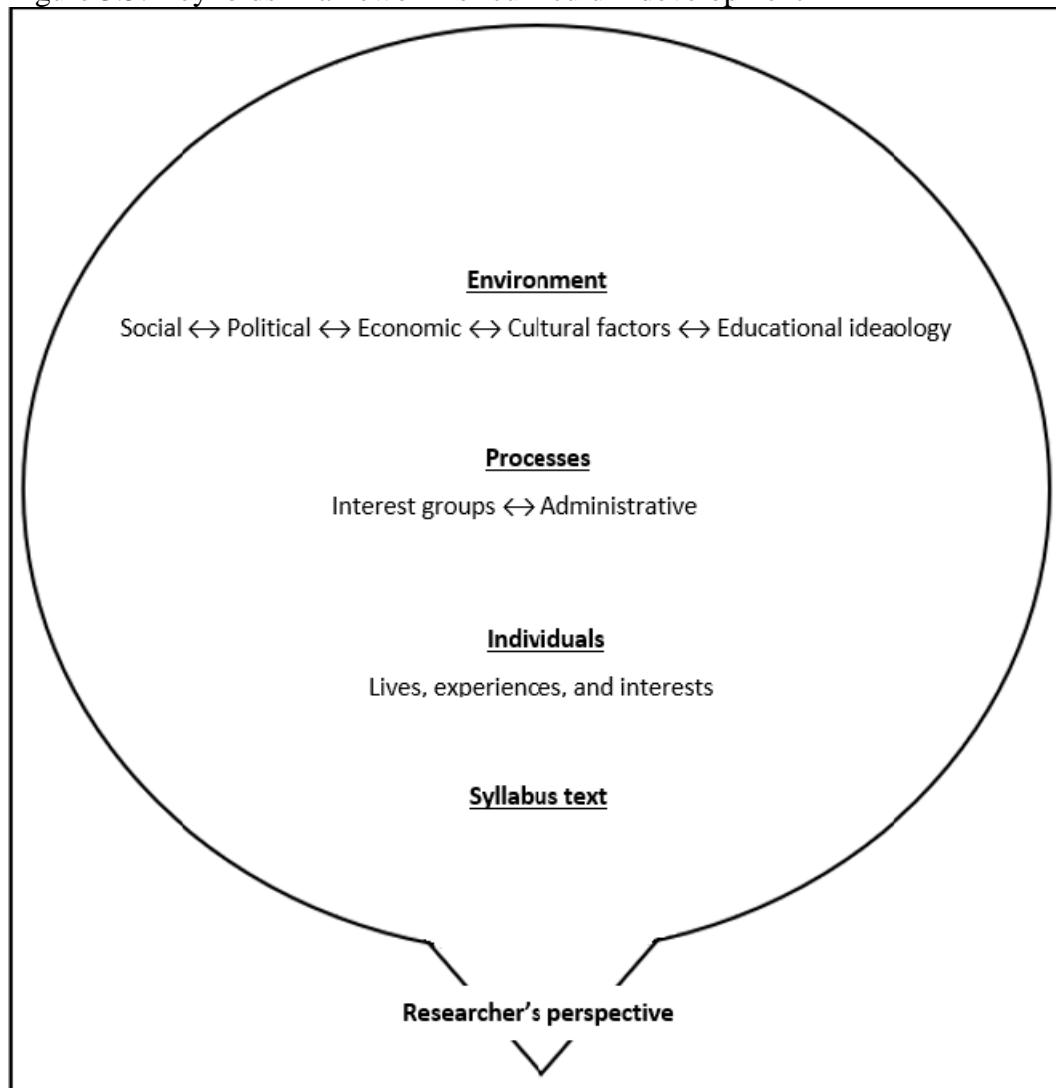
Eisner (1979, 1991) proposes a systematic-aesthetic model for curriculum development where he combines behavioural principles with an aesthetic perspective. In such a context, “teaching is treated as an art which requires a level

of scrutiny, assistance, and support that any performing art deserves” (Phan, 2015, p. 25). Instructors under the systematic-aesthetic model are required to connect the curriculum to the changing, external society and to aim for continuous development of the curriculum. Eisner (1991) elaborates this view as follows:

Let us define pedagogical roles more broadly and flexibly so that teachers can spend a year mentoring their younger colleagues, working on curriculum development, developing better assessment methods, creating liaisons with community agencies such as museums, hospitals, cultural centers, nursing homes, businesses. (p. 80)

Similarly, Reynolds (2001) asserts that “any understanding of syllabus development should involve the environment in which it was developed, the processes involved in syllabus development, the individuals associated with the development of syllabus and their life experiences, and the actual text which is produced” (p. 1). Reynolds (2001) proposes a further four-phase model for the syllabus and curriculum development process. This model developed as a result of 22 years of grounded research studying changes in syllabi in Australia. Reynolds’ model could be seen as a framework of interrelating factors rather than as a sequence of steps (see Figure 3.5). In this framework, the facets of the environment for syllabus development comprise sociopolitical, economic, and cultural factors as well as the prevailing educational ideology. ‘Processes’ refers to the power struggles between stakeholder groups and the administrative structure in the form of, for example, roles and procedures. ‘Individuals’ refers to the unorganised impact of particular individuals in the curriculum process, and ‘text’ refers to the meanings and interpretations (the story) revealed in analysing and understanding the syllabus document.

Figure 3.5: Reynolds' framework for curriculum development



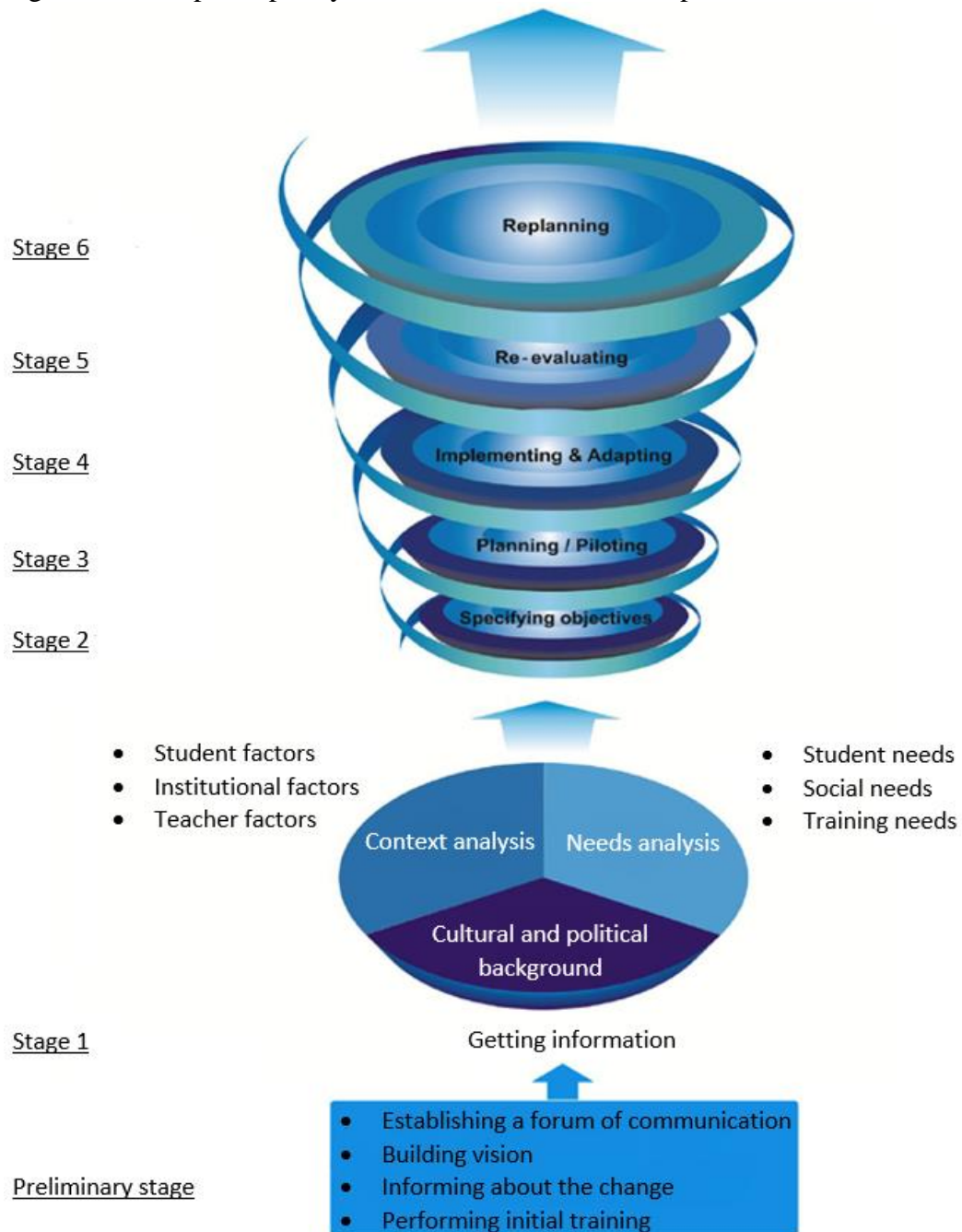
Source: Adapted from Reynolds (2001, p. 2).

Finally, stressing the importance of involving potential stakeholders in curriculum development, Phan (2015) presents a participatory model for curriculum development. According to Phan (2015, p. 284), a forum of communication should be established in the preliminary stage of this model “so that stakeholders at all levels are fully engaged in the process of negotiation and collaboration through which vision for change related to curriculum development is wholly informed”. Once the preliminary stage is complete, the curriculum developers then enter a process that consists of six stages (see Figure 3.6) as follows:

1. Getting information about stakeholders' expectations, the political and cultural background, and contextual analysis.

2. Specifying the curriculum objectives and learning outcomes, which should lead to discussion among stakeholders about learning experiences and course structure and delivery.
3. Planning and piloting. This stage comprises a series of discussions and decision-making steps regarding the content, teaching methods, and assessments. In addition, the planned curriculum is tried out with selected participants at this stage to ensure the alignment between curriculum planning and implementing and the coherence of the curriculum where the desired learning outcomes are consistent with teaching methods, content, and assessment.
4. Implementing and adapting. This stage involves identifying potential challenges in implementing the planned curriculum. Discussion and dialogue on experiences and views are encouraged at this stage before any necessary adjustments are made.
5. Re-evaluating is an ongoing process of examining new needs, analysing new situations, and measuring how well the planned curriculum is implemented.
6. Replanning uses feedback obtained in the previous stages to develop a new curriculum or to renew the old one.

Figure 3.6: The participatory model of curriculum development



Source: Adapted from Phan (2015, p. 283)

As illustrated in Figure 3.6, Phan portrays curriculum development as an ongoing and spiral process that consists of the following key features.

First, there is iterative revisiting of curriculum elements (objectives, sequence of content, teaching methods, assessment) throughout the course, at different levels of difficulty. Second, new learning is related to previous learning, and adapted to new situations. Last, learning outcomes increase with each iteration, and suit new requirements (p. 281).

It is worth mentioning that this model shares some features with Taba's (1962) and Reynolds' (2001) models, which both emphasise that the consideration of the needs of stakeholders and the context in which the curriculum is developed is essential to establish a foundation for curriculum development. As illustrated in section 2.6, current accounting curricula in Jordanian universities were not founded on stakeholder and contextual analysis but were imported directly from developed countries. This study argues for a different process in which a stakeholder and contextual analysis is an essential starting point in the curriculum design programme. The design process of the forensic accounting framework developed in this research follows Taba's framework for curriculum development (see section 5.5 for details of the design process of the forensic accounting framework developed in this research). Taba (1962) proposes a unique framework that links theory to practice, choice, and actions. Taba's (1962) framework goes beyond emphasising the central role of stakeholders and contextual factors to proposing a strategy for an active engagement of stakeholders and effective management of external factors in curriculum development (see section 5.5). Such factors include: the goals, strategies, and resources of the education provider; the pressures and values of the community in which the education provider is located; and the personal style and characteristics of both teachers involved and student population (Lunenburg, 2011).

The following two sections examine the influences that Islam might have on education in general, and forensic accounting education in particular, because Islam plays a powerful political and socioeconomic role within Middle Eastern countries, including Jordan (see section 2.3).

3.3 Islamic Perspective on Education

Islam represents a comprehensive and distinct framework for the understanding of life and the universe (Chrisp, 1991). Islamic philosophy of education considers the spiritual and material dimensions of human beings (Rayan, 2012). Islam's approach toward education is more than just providing opportunities for a better material life. From the Islamic perspective, education also caters to inner human needs and spiritual goals (Kadi, 2006). The Qur'an and the Sunnah are full of encouragement

to pursue knowledge (Khan & Sheikh, 2012). The very first verse of the Qur'an (96:1-5) revealed to the Prophet of Islam reads:

Read: In the name of the Lord who createth. Createth man from a clot.
Read: And the Lord is the most bounteous. Who teacheth by the pen.
Teacheth man that which he knew not.

According to Islam, beneficial education, which leads to an effective benefit in different fields of life, is considered a sacred duty that can be viewed as a form of worship. This philosophy arises from the concept of *khilafah* [vicegerency] (Khan & Sheikh, 2012). From this perspective, the earth has been given to Man in trust from God. The duty of Man is to preserve the trust and invest it for the benefit of all. Hence, education from the Islamic perspective involves harmonious development of one's personality—spiritual, moral, and intellectual—in order to do justice to one's divine duty as a vicegerent (Khan & Sheikh, 2012).

Allah in Islam is the only one who possesses complete and perfect knowledge and attributes. Therefore, according to Islamic belief, a conflict between 'revealed' knowledge and the 'rational' sciences can never exist. However, any apparent conflict between revealed knowledge and the rational sciences stems from the incapacity of the seeker to attain the truth or from his faulty understanding of the revelation (Al-Qaradawi, 1999).

The Qur'an is not a book of science. However, in its profound verses, many scientific facts are mentioned within the context of urging people to pursue research and reflection in order to understand the Creator and his creations. Examples of those scientific references are: the developing stages of the human embryo (Qur'an, 23:12-14); the planets' orbits and the composition of space (Qur'an, 36: 37-40); and, the formation of natural phenomena (Qur'an, 2:164). These examples indicate that the concept of science in Islamic thought goes beyond religious sciences to natural and human sciences. However, the search for knowledge in Islam is not undertaken for its own sake; rather, its purpose is to gain the right knowledge that leads to the betterment of the lives of all living creatures. This Islamic philosophy is emphasised several times in the Sunnah, which cautions against knowledge from which no benefit is derived (Khan & Sheikh, 2012).

As discussed above, Islamic texts attach great importance to knowledge and education. However, in order to reach a deeper understanding of the Islamic philosophy of education, discussion must go beyond the Islamic theology texts and extend to a contextual analysis of Islamic educational practice and philosophy throughout history.

3.3.1 Historical and contextual analysis of Islamic educational practice.

In the early centuries of Muslim history, higher curricula studies were mainly religious and included the sciences of Qur'anic interpretation [*tafsir*], traditions of the Prophet [*sunnah or hadith*], jurisprudence [*fiqh*], creed [*aqidah*], and philosophy [*kalam*]. Other branches of knowledge such as literature, history, and linguistics had developed at the margins of the religious sciences (Anzar, 2003). However, the rapid expansion of the Islamic empire across the Middle East, North Africa, Western and Central Asia, and Southern Europe between AD 634 and AD 750 fostered a scientific and cultural flourishing (Lapidus, 2002; Turner, 2010).

The Muslim empire reached a peak of scientific and intellectual achievement under the Abbasid¹¹ caliphate with the *caliphs'* [successors'] patronage of scholars [*ulama*], the translation movement, and research, particularly in mathematics, physics, and medicine (Young, Latham, & Serjeant, 2006). In addition, a revolutionary step in the Abbasid era was the establishment of the house of wisdom university [*Bait Al-Hikmah*] in AD 830 in Iraq, the very first scientific and intellectual institution in Islamic history and a leading scientific centre in the medieval world (Elayyan, 1990; Encyclopaedia Britannica, 2015). In this institution, many manuscripts and books in languages such as Greek, Chinese, Indian, Persian, and Sanskrit were translated into Arabic. Furthermore, *Bait Al-Hikmah* attracted scientists, authors, translators, and scribes from all over the world for research, dialogue, and discussion (Anjum, 2014; Elayyan, 1990). Moreover, numerous other achievements of Muslim scholars during the medieval period include the

¹¹ "Abbasid Dynasty, second of the two great dynasties of the Muslim Empire of the Caliphate. It overthrew the Umayyad caliphate in AD 750 and reigned as the Abbasid caliphate until destroyed by the Mongol invasion in 1258" (Encyclopedia Britannica, 2014, p. 1).

development of algebra, algorithms, and the invention of surgical instruments (Anjum, 2014; Haq & Khatib, 2012). Many historians refer to this period of intellectual and scientific flourishing between the 8th and the 13th centuries as ‘the Islamic golden age’ (Falagas, Zarkadoulia, & Samonis, 2006).

The intellectual and scientific contribution of Islamic civilisation is traditionally believed to have begun to decline in the early 13th century (Ahmed, 2001). Levels of scientific contribution in the Muslim world are currently surprisingly low (Falagas et al., 2006; McCleary, 2010). Researchers pose several propositions in an attempt to understand the actual role of Islam during both the Islamic golden age and the era of scientific retreat in the Muslim world (e.g., Allawi, 2009; Bennison, 2009; Hunter, 2009). According to the Marxian theory of historical materialism, all social structures such as religion and family values arise from the economy (Lobkowitz, 1964). Religions, including Islam, play no role at all in Karl Marx’s (1844) theory of historical materialism, although he does propose that people turn to religion when they are unable to understand certain phenomena around them. Hence, he describes religion as “the opium of the people” (Marx, 1844, p. 1), which they must quit in order to discard their illusions, regain their senses, and move towards reality, science, and education (Surin, 2013; Boer, 2013).

Unlike Marx, Max Weber stresses that educational systems are embedded in other social spheres such as religion, politics, and law, as they either contribute to or constrain education (Forrester, 1937). However, Weber proposes that religious beliefs and organisations do not necessarily provide support for the development of knowledge, particularly, the sciences (Samier, 2002). In his review of the foundation and expansion of Islam as the dominant religion in the Middle East, Weber proposes a political, economic, and military explanation of the nature of the Islamic society and treats the role of values as secondary (Turner, 1998). Weber suggests that Islam is concerned with human behaviour more than human beliefs and, thus, that values and education do not play a significant role in Islamic thought (Fischhoff & Arjomand, 1976). Weber suggests that Islam does not provide an appropriate theoretical basis for erecting the concept of science and promoting education (Samier, 2002).

In contrast to Marx and Weber, Muborakshoeva (2012) and Segal (1996) argue that Islam cannot be viewed as an obstacle to education, science, or scientific research. Noaparast (2014) asserts that Islamic philosophy, including epistemology, ontology, and ethics, is perfectly compatible with the development of science and education. However, according to Falagas et al. (2006) and McCleary (2010), the current low levels of science and development in the Islamic world result from a cumulative effect of multiple factors including political instability and repression and the negative attitude of many religious elites toward science.

To conclude, Islam emphasises the value of knowledge and the importance of education for both men and women. However, attitudes toward science and education in the Muslim world have varied over the centuries owing to political, social, and contextual factors (Anwar & Bakar, 1997). The central message of seeking knowledge to ‘serve the creatures of God and enrich the earth with life and civilization’ [*imaratul-ard*] in Islam can form a significant motivation for Muslims today to pursue forensic accounting education. However, forensic accounting curriculum developers and education providers in Jordan must consider the dominant beliefs and cultural norms when developing and implementing a forensic accounting education programme (see section 2.3). The perception of knowledge in Islam is “value-oriented and informed by ethical and theological concerns” (Kamali, 2003, p. 116). Higher education providers in Jordan must, therefore, consider this perception when developing their curricula. It follows that increasing public awareness and promoting the value of forensic accounting education and practice are essential in the process of introducing forensic accounting as a new topic to study in Jordan. This point will be further explored in chapters 6, 7, and 8.

3.4 Islam and Forensic Accounting

The concepts of financial accountability and governance are central in Islam. Many Islamic concepts and principles such as *khilafah* [vicegerency], *qist* [justice], and *hisbah* [supervision of the market] carry substantive implications concerning governance and forensic accounting. As stated earlier (see section 3.3), the philosophy of *khilafah* [vicegerency] in Islam provides a comprehensive ideological perspective for the Islamic view of life, including the business and

economic system (Khan & Sheikh, 2012). On the basis of this general philosophy, Islam prohibits all practices that may cause harm, either to specific stakeholders or to the community as a whole. Islam places high importance on justice. According to the Qur'an (57:25), all the messengers of God were sent to establish justice (qist) in human society. The Islamic economic system ensures socioeconomic justice and equitable distribution through several means such as *zakah* [obligatory charity], laws of inheritance [*al-mirath*], prohibition of hoarding, and prohibition of usury (Iqbal & Mirakhor, 2013). Fraud and corruption are considered unlawful in Islam due to being 'unjust' and 'against the well-being of society'.

While Islam and the West agree that fraud and corruption are problems, they differ considerably with regard to the nature of these problems and, thus, their recommended approaches to remediation. Mainstream Western philosophy considers corruption, at its core, as a sign of bad governance (Markham, 2006; Persson, Rothstein, & Teorell, 2013; Ramaswamy, 2005). Therefore, suggestions for solutions tend to focus on ways to improve governance. This solution entails an agenda for political and economic reform that includes limiting concentration of powers, strengthening the rule of law, and enhancing and enforcing monitoring and accountability (Glaeser & Goldin, 2007; Rose-Ackerman & Palifka, 2016).

By contrast, in Islam, corruption is not so much a governance issue as a moral problem that, according to Hassan and Lewis (2014), "may reflect one or more of two things: 1. weakness of internal restraint [...] due to a falling apart of [the] traditional education system; 2. weakness of external restraints due to sticking neither with the Shari'a nor with developments in secular law and institutions" (p. 299).

Moreover, the way accountability translates in Islam is different from the way it translates in the Western philosophy. The Islamic concept of accountability emphasises the importance of moral reasoning and self-monitoring (Nahar & Yaacob, 2011). In Islam, people are born pure and sinless and they must do all in their power to maintain this status (Al-Qaradawi, 1999). Nevertheless, the Qur'an describes humans as inherently weak (Qur'an, 4: 28) and forgetful (Qur'an, 7: 201; 51: 55; 6, 68) and accepts that maintaining a sinless life is, thus, impossible for

humans. Those who commit immoral conduct are, however, required to stop once they “remember” (Qur’an, 7: 201) God’s instructions and repent. In the Qur’an (39: 35-54), God says:

Say: O My slaves who have been prodigal to their own hurt! Despair not of the mercy of Allah, Who forgiveth all sins. Lo! He is the Forgiving, the Merciful. Turn unto your Lord repentant, and surrender unto Him, before there come unto you the doom, when ye cannot be helped.

According to the Qur’an (25: 70), a sincere repentance [*tawba nasuh*] is always accepted by God and rewarded by “changing the sins into good deeds”. Achieving sincere repentance requires the Muslim to fulfil four conditions, namely giving up the sin, regretting having done it, resolving not to go back to it, and doing whatever needs to be done to rectify the offence or to compensate for it if it has to do with the rights of another human being or society (Al-Qaradawi, 1999). While it is not a condition of repentance that a punishment [*hadd*] be carried out on the repentant person, some unlawful acts such as burglary and murder are regarded as crimes that should be subject to punishment in this world (Serajzadeh, 2001).

The texts of the Qur’an and Sunnah offer an ethical framework that promotes financial accountability and social justice at both the individual and the institutional level. In Islam, members of a community have an obligation to facilitate socioeconomic justice by ‘enjoining what is good and forbidding what is evil and unfair’ [*al-amr bi al-ma’ruf wa al-nahy ‘an al-munkar*]. Prophet Muhammad (PBUH) said (Muslim, Book. 1, Nu. 79):

He who amongst you sees something abominable should modify it with the help of his hand; and if he has not strength enough to do it, then he should do it with his tongue, and if he has not strength enough to do it, (even) then he should (abhor it) from his heart, and that is the least of faith.

While both the Qur’an’s and the Prophet’s traditions, as indicated in the above discussion, envisage that every individual has a responsibility to enjoin what is good and forbid what is unfair, the state has an obligation to establish official institutions

to ensure compliance with regulatory and ethical standards (Dogarawa, 2013). In the Qur'an (3: 104), God says:

There has to be a group of people from among you who call towards the good, and bid the Fair and forbid the Unfair. And it is these who are successful.

In line with the Qur'anic directive, Prophet Muhammad (PBUH) and his early *caliphs* [successors] personally undertook inspection of markets to ensure that traders did not involve themselves in unethical behaviour and appointed governors to perform the role. As the number of markets and trades grew during the expansion of the Islamic state in the 7th and 8th centuries, the responsibility for 'market supervision' [*hisbah*] gained more recognition and prominence, and a special *hisbah* institution was established (Dogarawa, 2013). Furthermore, the role of the *hisbah* institution evolved in this era with the objective to "obligate the correct ethical behaviour in the wider social context", "to empower members of the community to act as 'private prosecutors' in the cause of better governance by giving them a platform for social action", and to provide "Islamic religious auditing, which is a device to solicit juristic advice, monitor compliance with Islamic precepts and collect zaka" (Lewis, 2006, p. 8).

The concept of *hisbah* has an immediate relevance for the topic at hand, that is, 'Islam and forensic accounting'. The *hisbah* institution started first as a supervisory and advisory agency that regulates the scales in the market and controls usury, profiteering, harmful monopolies, and other un-Islamic business transactions (Kamla, 2009). Later, however, the *hisbah* institution developed into a moral censor that promotes economic and social wellbeing. Hence, the concept and role of the *hisbah* institution in early Islamic governance models provides inspiration for accounting and forensic accounting today, as it contributes to the debates surrounding the role of accounting, which should go beyond narrowly perceived financial considerations and concentrate on issues such as promoting accountability and transparency, eradicating fraud and corruption, and ensuring that businesses are operating in line with the public interest (Kamla, 2009).

To conclude, Islam has a deeply rooted concern with governance and forensic accounting from a holistic perspective. There are clear principles to work out in terms of implications for forensic accounting, such as the *khilafah* philosophy and the concepts of accountability and social justice in Islam. Reflection on these principles uncovers opportunities, identifies some conceptual and operational challenges, and suggests new ways forward for this area of accounting in Jordan as a Muslim majority country. Religious and cultural requirements for forensic accounting practice and education in Jordan will be explored further in chapter 7 (section 7.4.).

3.5 Summary

Values, ideas, and beliefs play an important role in shaping perceptions, attitudes, and preferences and in explaining the process of social change and behaviour. Thus, social and behavioural theories are portals through which to reach an optimal understanding of stakeholders' trends and expectations within various contexts. This chapter outlined the theoretical framework for the study by drawing on the stakeholder concept in curriculum development, the Islamic perspective on education, and Islam and forensic accounting.

This chapter first discussed and compared dominant curriculum models with a focus on the process of curriculum development and its requirements and the influence of the stakeholder concept in these models. Reviewing the models outlined in this chapter provides a basis for the design process of the forensic accounting framework that will be developed in this research. This study adopts a stakeholder approach to the curriculum design process, an approach that considers understanding the stakeholder requirements in the context in which the curriculum is developed as the first task in the development of an effective curriculum.

This chapter has also explored the concept of education in an Islamic theological, historical, and realistic context in an attempt to understand the perceptions and expectations of higher education, in general, and forensic accounting education, in particular, within a Jordanian context. This discussion has revealed that Islam differentiates between 'beneficial' and 'not beneficial' knowledge and emphasises

seeking only knowledge that is beneficial for people and society. This perception, therefore, must be considered when developing forensic accounting programmes in Jordan by promoting the value of forensic accounting education and practice in the process of introducing forensic accounting education in Jordan.

Finally, this chapter discussed the relevance of key Islamic principles to the concepts of governance and forensic accounting. Islamic traditions recognise the importance of governance and the role of accounting in fighting fraud and corruption. However, fraud prevention and anticorruption strategies may remain unfulfilled if not, from an Islamic standpoint, accompanied by a moral revival and a cultural change. Forensic accounting which is promoted according to the Islamic and cultural characteristics of Jordanian society may be more convincing to Jordanians, as it represents financial accountability and social justice as an integral practice of Muslims' everyday lives.

The following chapter defines the landscape of forensic accounting, explores literature on the forensic accounting profession, education, and definitions of it, and considers forensic accounting in a cultural context.

Chapter 4

Literature Review

4.1 Introduction

This chapter sets the background for this thesis by providing a review of literature relating to forensic accounting. Though this study focuses on forensic accounting, much of the literature that supports this thesis is found in works that deal with the larger framework that considers fraud from the perspective of the auditor (Hogan, et al., 2008; Trompeter et al., 2012). Hence, in order to refine the focus of this study, it is useful to first define the landscape of forensic accounting in relation to fraud.

The first section focuses on the nature, psychology, and types of fraud and how fraud could be countered. This section pays attention to the ability and responsibility of the auditor as regards fraud and the need for forensic accounting. The second section defines and outlines the scope of ‘forensic accounting’, both as a profession and a field of practice. Throughout this section, close attention is paid to understanding the evolution of the forensic accounting profession and the use and the perception of the term ‘forensic accounting’ in the literature. Thereafter, a comprehensive definition of forensic accounting is offered. The third section reviews the literature in the area of forensic accounting education. This section highlights the importance and relevance of forensic accounting education and the perception of academics and practitioners regarding the content and delivery of forensic accounting education. The fourth section explores the significance of considering the cultural context of stakeholders in terms of the effectiveness and cultural appropriateness of forensic accounting services and for teaching forensic accounting in Jordan. The final section outlines the gap in the literature this study attempts to fill and clarifies the rationale for this study.

4.2 Landscape of Forensic Accounting

This section covers some of the basic principles around fraud, namely the concept, types, and elements of fraud. These principles form the building blocks of an effective antifraud strategy, and a forensic accountant needs to be able to grasp and apply this common body of knowledge regarding fraud in the accounting environment (Singleton & Singleton, 2010). Thereafter, this section highlights the expectation gap concerning the auditor's duty to detect and prevent fraud and underlines the need for forensic accounting.

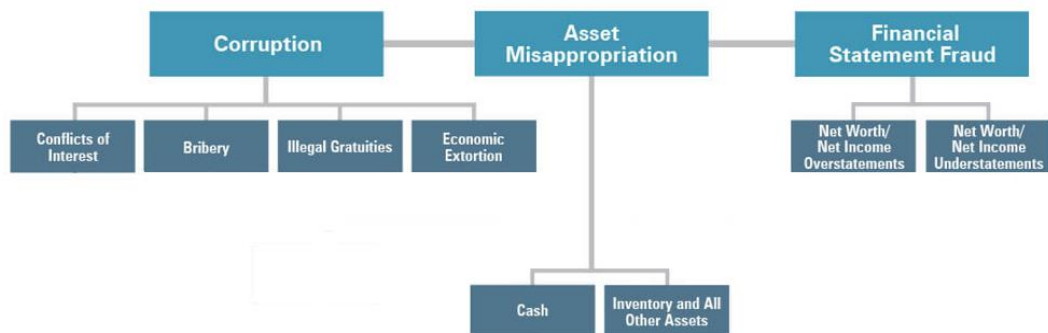
4.2.1 The anatomy of fraud.

Morality, integrity, truth, justice, rights, and the interests of others are core values in the discussion of fraud and corruption. Both the terms 'fraud' and 'corruption' carry negative connotations of intentional deception, lack of integrity, and the abuse of a position of trust for unjustified or dishonest gain (Brytting, Minogue, & Morino, 2011). Fraud is broadly defined in the Oxford English Dictionary (2018) as "wrongful or criminal deception intended to result in financial or personal gain". In like manner, Riahi-Belkaoui (2004) offer a broad definition of fraud that involves any intentional deception of another person or group by lying or cheating for the purpose of deriving an unjust personal, social, political, or economic advantage. Prominent businesses and not-for-profit organisations (e.g., PricewaterhouseCoopers (PwC, 2014a), the Association of Certified Fraud Examiners (ACFE, 2018), and the United Nations Development Programme (UNDP, 2011) adopt a similarly inclusive definition of fraud. In this study, the definition used by the UNDP (2011) is the most suitable. For the UNDP (2011), fraud is an umbrella term that covers "any act or omission that intentionally misleads, or attempts to mislead, a party to obtain a financial or other benefit or to avoid an obligation" (p. 2). In this sense, fraud is viewed as a generic term that can be applied to any dishonest act that causes harm to any person or entity, such as asset misappropriation or identity theft or impersonation, as well as the different forms of corruption and white collar crime (Albrecht, Albrecht, Albrecht, & Zimbelman, 2016) including bribery, extortion, and embezzlement (Definitions of

commonly used terms related to forms of fraud and corruption can be found in Appendix 5).

Frauds can be classified in several ways such as by type of scheme, type of victim, or type of perpetrator. One of the most common fraud classification methods is to divide frauds according to perpetrators, that is, employee embezzlement, vendor fraud, customer fraud, and management fraud (Hogan et al., 2008). Another way to classify frauds is to divide them into those that are committed against organisations (typically a form of employee, customer, or vendor fraud) and those that are committed on behalf of organisations (a form of management fraud or financial statement fraud) (Albrecht et al., 2016). While some overlap might be noticed in classifying a single fraud under the previous taxonomies (for example, a fraud that involves collusion between a manager and an employee), the Association of Certified Fraud Examiners (ACFE, 2018) proposed a fraud classification system, referred to as ‘the fraud tree’ (see Figure 4.1), which identifies three major types of fraud that are relatively unique in their characteristics. These three major types of fraud are corruption, asset misappropriation, and financial statements fraud (Association of Certified Fraud Examiners (ACFE), 2018). The distinctive characteristics (e.g., fraudster, motivation, benefactors, and victims) are useful in customising fraud investigations and/or prevention programmes for the antifraud environment.

Figure 4.1: The ACFE’s fraud tree

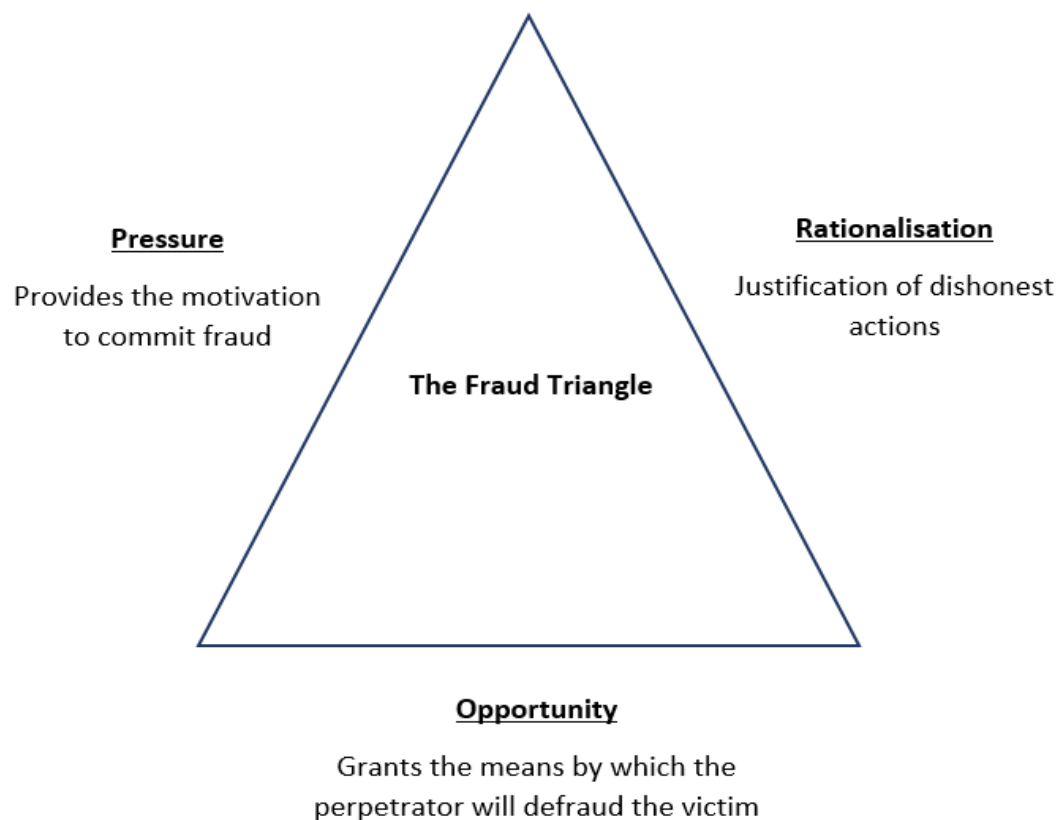


Source: Adapted from the Association of Certified Fraud Examiners (ACFE) (2018, p. 11)

An understanding of the perpetrators and the factors behind their behaviour better prepares forensic specialists for the challenge of dealing with fraud in its various

forms (Singleton & Singleton, 2010). An examination of forensic-related literature reveals that much of the current understanding of why individuals commit fraudulent behaviour is grounded in the ‘fraud triangle’ (Hogan et al., 2008; Trompeter et al., 2012). The fraud triangle, now adopted in auditing standards¹², is an explanatory model that identifies the core factors that lead to fraudulent behaviour. These three factors are perceived pressure, perceived opportunity, and rationalisation (see Figure 4.2), in particular, pressure that provides the motivation to commit fraud; opportunity or circumstances that grant the means by which the perpetrator will defraud the victim; and, rationalisation or attitude that helps the perpetrator to justify his or her behaviour in a way that is acceptable to his or her internal moral compass (Albrecht et al., 2016).

Figure 4.2: The fraud triangle



Source: Adapted from Albrecht et al. (2016).

¹² Statement on Auditing Standards (SAS) 99 – consideration of fraud in a financial statement audit (AICPA 200, para. 31-33) has outlined several fraud risk factors (red flags) by reference to the three elements of the fraud triangle.

The fraud triangle has received significant attention from accounting researchers (e.g., Dellaportas, 2013; Dorminey, Fleming, Kranacher, & Riley, 2010; Hogan et al., 2008; Murphy & Free, 2015; Wolfe & Hermanson, 2004), who have identified shortcomings, offered important insights, and proposed enhancements to the model.

The review of the literature reveals that research related to the fraud triangle can, in the main, be classified into two groups. The first group suggested enhancements to the fraud triangle by extending particular aspect/s related to the three elements of the model. Dorminey, Fleming, Kranacher, and Riley (2012), for example, argue that a major weakness in the fraud triangle is that it focuses merely on pressures that involve a financial need. Dorminey et al. (2012) proposed to expand the set of fraud motivations to include nonfinancial pressures such as frustration with work, coercion, ideology, and ego (entitlement). Another weakness in the fraud triangle, according to Murphy and Free (2015), is its undermining of the role of collusive behaviour and management override in creating opportunities to commit and conceal frauds. Murphy and Free (2015) suggested that the consideration of the wider antifraud environment, including culture and corporate governance, in addition to traditional internal controls prepares forensic specialists to deal better with the challenges of management override and collusion.

The second group refined the fraud triangle by adding a new element or perspective to the model. Wolfe and Hermanson (2004), for example, argued that the fraud triangle alone cannot help to explain fraud, given that two elements of the fraud triangle (pressure and rationalisation) derive from the fraudster's perspective and, thus, generally are unobservable. The inability to observe these elements is particularly true for auditors, who often have limited interactions with potential fraudsters and, therefore, are unlikely to recognise red flags (symptoms) associated with pressure and rationalisation (Albrecht et al., 2016; Plessner, Betsch, & Betsch, 2011). Wolfe and Hermanson (2004), hence, proposed that the fraud triangle could be enhanced by considering the assessment of capability (personal traits and abilities) as a fourth element, as personal traits and abilities are more observable than pressure and rationalisation. This addition would change the model from a triangle to a four-sided shape, known as the fraud diamond. Similarly, Cohen, Krishnamoorthy, and Wright (2010) argued that personality traits and individual

ethics and integrity were not sufficiently emphasised in the fraud triangle. Cohen et al. (2010) proposed a new framework for understanding fraudulent behaviour by integrating the fraud triangle with the ‘theory of planned behaviour’, which incorporates attitude, subjective norms, perceived behavioural control, and moral obligation. Cohen et al. (2010) explained that this new framework could help the auditor and/or the forensic accountant to better understand the rationalisation corner of the fraud triangle and, thus, to improve their ability to detect fraud. A summary of the enhancements and extensions to the fraud triangle model are presented in Table 4.1.

Table 4.1 Summary of fraud triangle model enhancements and extensions

Shortcoming	Extension/enhancement	Benefit of extension/enhancement
‘Perceived pressure’ is an incomplete descriptor of a fraudster’s motivation.	Expand the set of fraudster’s motivations to include nonfinancial pressures such as coercion, ideology, and ego.	Provides a broader set of fraud motivations beyond financial need.
‘Perceived opportunity’ does not address collusive behaviour or management override.	Focus on an antifraud environment such as culture and corporate governance, in addition to traditional internal controls.	Prepares forensic specialists better to deal with the challenges of management override, corruption, and collusion.
‘Perceived pressure’ and ‘rationalisation’ are generally unobservable.	Fraud diamond: Add the assessment of capability as a fourth element.	Capability is generally more observable than pressure and rationalisation.
Personality traits and individual ethics are not sufficiently emphasised in the fraud triangle.	Integrate the fraud triangle with the ‘theory of planned behaviour’.	This new framework can help the auditor and/or the forensic specialist to better understand the rationalisation corner of the fraud triangle.

Source: Adapted from the Dorminey et al. (2010)

4.2.2 How to combat fraud?

Fraud and corruption present major problems for businesses, national economies, and, ultimately, individuals around the world. While most researchers and reports (e.g., the Association of Certified Fraud Examiners (ACFE), 2018; Hogan et al. 2008; Levi, 2013) have stated that fraud is increasing in both size and frequency, it is difficult to obtain a precise picture of the situation due to its inherent nature. This difficulty arises mainly because, due to their secretive nature (Bologna & Lindquist, 1995), the majority of frauds do not get reported (Gay & Simnett, 2018). For example, according to Button, Lewis, Shepard, Brooks, and Wakefield (2012), only approximately 1.5 per cent of all fraud discovered in the United Kingdom in 2010

was reported. Albrecht et al. (2016) explained that victims of fraud are often more concerned about embarrassment and potential damage to their reputation which results from making frauds public than they are about punishing perpetrators of fraud. Hence, businesses and individuals who have been defrauded often prefer to hide the fraud and quietly terminate perpetrators rather than report the fraud or make it public. This approach often results in what might be thought of as ‘antifraud resistance’, where fraudsters develop, through accumulated experience, the ability to overcome internal controls and become more sophisticated in the ways they commit fraud (Albrecht et al., 2016).

More alarming than the high scope, size or costs of fraud is that it is becoming more technological in nature and, thus, easier to commit and harder to detect (Taylor, Fritsch, & Liederbach, 2014). Given the development of digital information, the growth of ecommerce, and the rise in high profile data breaches, cyber frauds are receiving an increasing amount of attention from those in the business community, including accounting firms (Brody, Melendy, & Perri, 2012; Rezaee, Wang, & Brian, 2018). The 2017 PCPS CPA Firm Top Issues Survey found that accounting firms saw keeping up with new technologies and their impact on their audit and accounting practices as a major concern and challenge. Equally, several researchers (e.g., Kearns & Barker, 2011; Lang, Bashir, Campbell, & DeStefano, 2014) have stressed the need for new auditing and antifraud tools and procedures that can mitigate the growing digital risks and maximise audit effectiveness. Rezaee et al. (2018), for instance, stressed that auditors need to develop proactive and innovative approaches to survive the ever-changing shifts in technology, whereas Kokina and Davenport (2017) emphasised that accounting firms must invest in cognitive technology¹³ to advance audit quality. Moreover, Fay and Negangard (2017) argued that auditors need to have stronger analytical, data science, and IT skills to be able to appreciate and consider the impact of IT when assessing the audit risk¹⁴, developing audit strategy, and conducting the audit.

¹³ Technologies able to perform tasks traditionally assumed to require human intelligence, for instance, reasoning from partial or uncertain information, and identifying faces or recognising handwriting, are known as cognitive technologies.

¹⁴ Audit risk is the risk that the auditor expresses an inappropriate audit opinion when the financial statements are materially misstated. Audit risk is a function of the risks of material misstatement, due to either inherent or control risk and detection risk (Gay & Simnett, 2018).

Several economic crime and fraud surveys released by major audit firms and professional bodies (e.g., the Association of Certified Fraud Examiners (ACFE), 2018; Ernst & Young (EY), 2018; PwC, 2018) revealed that most frauds are currently discovered by accident or whistleblowing. Furthermore, even if fraud is detected, it is often challenging to obtain evidence that is strong enough to support or secure a prosecution (Albrecht et al., 2016), which raises questions about the effectiveness of internal controls and external audits in combating fraud and highlights the need for forensic accounting (Kramer et al., 2017). The following subsection first reviews the development of the auditing profession and the auditor's abilities and responsibilities relating to fraud and then provides a rationale for the need for forensic accountants.

Forensic accounting did not develop in isolation. The establishment and growth of the forensic accounting profession is closely intertwined with the history and the evolution of the auditing profession (Carnes & Gierlasinski, 2001; Crumbley, 2001; Gay & Simnett, 2018). In order to fully capture the background and concept of forensic accounting it is, therefore, important to touch upon the development of the auditing profession (Crumbley, 2001). This subsection reviews the development of the auditing profession with a focus on the procedures and objectives of auditing and the role of auditors relating to fraud. An overview of the change and development in the auditing profession is summarised in Table 4.1 and discussed in the paragraphs that follow.

Table 4.2: Historical changes in the auditing profession

Stage	Events	Stakeholders	Attesting as to	Scope
2000-3000 BC to 18th century: Babylonia, Egypt, China, Greece, Rome	Expenditures by agents of governments	Monarchs, feudal lords	Authorised use of church, government funds for enterprises	Detailed checks on use of church, monarchy, government resources
18th and 19th century: England, other parts of Europe	Costly trading ventures, shipping	Monarch, major trading companies (Dutch East-India, Hudson Bay)	Authorised use of government, single-investor funds	Detailed checks on company expenditures
20th century: company growth, international markets	Many small investors, seeking highest profit, company growth	Many private investors, third parties gain attention in the courts	‘True and fair’ (UK) or ‘fairly present’ (US, Canada). Profit a new focus	Systems audit growth
21st century (so far): market scandals, growing technology	Scandals (e.g., Enron, WorldCom), new regulation on audit professions, technology, intellectual asset growth, litigation service industry	Investors and some third parties, profit-share price, social and environmental stakeholders	‘True and fair’ and GAAP compliance, going concern, fraud, illegal acts	Risk-based audit, global companies, systems growth, finance market users

Source: Adapted from Van Peursem and Pratt (2006)

The need for and evidence of audits, mainly in the form of markings on papyrus, wooden tablets, and stones, can be traced back to public accountability systems in ancient Egypt, Babylonia, China, and the Greek and Roman empires more than 3000 years ago (Macve, 2015; Most, 1987; Van Peursem & Pratt, 2006). Auditing in that era was used primarily for government or feudal control and was concerned with checking the accounting of officials entrusted with public funds to ensure that the assets collected and disbursed were properly accounted for (Drylie, 2018). Specifically, the purpose of these audits was to detect bookkeeping errors and inaccuracies as well as to control fraudulent or corrupt practices (Van Peursem & Pratt, 2006).

With the 18th century Industrial Revolution, businesses needed vast amounts of capital to fund major rail projects, large factories, and shipping (Meier, 1958). Outside investors were sought and small amounts of capital were contributed by a large number of investors (Matthews, 2006). This shift changed the structure of business and ownership and created a situation where ownership came to be distant

from management (Meier, 1958). Concerns about management honesty and authorised use of funds reflected both agency and accountability concerns, leading to a demand for a type of audit that was largely concerned with the stewardship of assets (Van Peurseem & Pratt, 2006). The accounts being audited were subjected to detailed examination, with a focus on arithmetical accuracy, potential fraud, and compliance with rules and authority (Drylie, 2018).

The periods after World War I and World War II were marked by economic expansion and the growth of modern corporations. Investment in business entities grew rapidly, securities markets developed, and a new breed of small investors (shareholders) emerged (Matthews, 2006). Unlike the investors of earlier years, 'shareholders' were concerned mainly with the return on investment rather than the management or fortunes of the companies they were investing their money in. These developments further contributed to the separation of ownership and management (Most, 1987). The control of companies gradually passed to salaried managers who were expected to generate a reasonable return on the financial resources entrusted to them (Watts & Zimmerman, 1983). In this new economic environment, the accountability of company managers was extended from the honest, authorised use of shareholders' funds to include the managers' performance and efficiency (Most, 1987). Return on investment became a surrogate for a manager's efficiency, and the auditor became, in effect, accountable to the market. The primary objective of an audit function changed in this period from the detection of fraud and errors to verifying the integrity of individuals charged with fiscal responsibilities and adding credibility to the financial statement (Van Peurseem & Pratt, 2006).

Moreover, due to the voluminous transactions involved in the conduct of business by large corporations in the 20th century, it became no longer practical for auditors to verify all the transactions (Gay & Simnett, 2018). Hence, the concept of materiality emerged as a major characteristic of the audit approach, and auditors placed higher reliance on companies' internal control and the use of sampling techniques in their audit procedures (Carpenter & Dirsmith, 1993; Teck-Heang & Ali, 2008). The emphasis on the role of auditors in providing 'reasonable assurance' over the 'truth and fairness' of the financial statements rather than 'absolute

assurance' was another major feature of the audit approach in this period (Gay & Simnett, 2018).

The beginning of the 21st century was defined by large profile accounting frauds, such as those involving Enron, WorldCom, and Duke Energy, which resulted in a collapse of public confidence in the auditing profession (Lindberg & Beck, 2004). These financial scandals started an intense debate on corporate disclosure, corporate governance, and the role of auditors (Rezaee, Lo, Ha, & Suen, 2016) and led to a series of regulatory and standards reforms, the most notable of which was the Sarbanes-Oxley Act (SOX) of 2002 (Cohen et al., 2010). The SOX Act (2002) contained 11 titles and covered issues such as enhanced financial disclosure, auditor independence, corporate and criminal fraud accountability, and white-collar crime penalty enhancement. In addition, in the same year, the Association of International Certified Professional Accountants (AICPA, 2002) issued its Statement on Auditing Standards (SAS) No. 99 in an attempt to provide guidance to auditors in fulfilling their responsibility to detect and report financial statement fraud (Imoniana et al., 2013).

Despite corporate governance reforms in the current century and authoritative guidance on an auditor's duties and liabilities, an expectation gap remains between society's expectations of auditors concerning fraud and the auditors' performance, as perceived by society (Cohen, Ding, Lesage, & Stolowy, 2017). While the general public appear to have an expectation that auditors will prevent, or detect and report, all fraud, auditors perceive this as an 'unreasonable' expectation (Gay & Simnett, 2018). This high expectation has led stakeholders, according to Hassink, Bollen, Meuwissen, and de Vries (2009), to frequently take legal actions against individual auditors or audit firms in fraud cases. The auditing profession response, however, has typically been to continue to consider fraud detection as a secondary audit objective (Cohen et al., 2017).

The purpose of an audit, as expressed in ISA 200, is to enhance the level of confidence in the integrity of corporate reporting for the benefit of stakeholders. This aim is achieved through the expression of an independent and objective opinion by the auditor on whether the financial statements "presented fairly", in all

material respects, or “give a true and fair view” in accordance with an applicable financial reporting framework (para. 4). When performing an audit, the auditor is required to obtain “reasonable assurance” (para. 5) about whether the financial statements are free from material misstatement, whether caused by fraud or error. Reasonable assurance is “a high level of assurance” (para. 5). It is attained when “the auditor has obtained sufficient appropriate audit evidence to reduce audit risk (that is, the risk that the auditor expresses an inappropriate opinion when the financial statements are materially misstated) to an acceptably low level” (para. 5). However, the auditor is not an insurer and his or her reasonable assurance does not constitute a guarantee as described in the judgment by Moffitt J in *Pacific Acceptance Corporation v Forsyth and Others* and as well as the *Kingston Cotton Mill* and *London and General bank* cases (Gay & Simnett, 2018). This situation results from the inherent limitations of an audit such as the necessity to sample, time and resource constraints, and the use of judgment in the identification of audit risks, “which result in most of the audit evidence on which the auditor draws conclusions and bases the auditor’s opinion being persuasive rather than conclusive” (para. 5).

Hence, given the inherent limitations as well as the procedural nature of the audit process, which is not primarily designed to detect fraud, the auditor cannot be expected to detect, and might be excused for not detecting, all fraud (Hassink et al., 2009). While appropriate action to narrow the audit expectation gap might lie in the elimination of unreasonable expectations of auditors through public education (McEnroe & Martens, 2001; Siddiqui, Nasreen, & Choudhury-Lema, 2009), several researchers (e.g., Gay & Simnett, 2018; Ruhnke & Schmidt, 2014; Sikka, Puxty, Willmott, & Cooper, 1998), nonetheless, believe that the auditing profession still has a critical role to play. This role involves broadening the responsibilities of auditors for fraud detection (Gay & Simnett, 2018); developing the audit tools and procedures to improve auditors’ responsive to fraud risks (Halbouni, 2015); and, ensuring that accounting education and professional training requirements reflect the increasing responsibility and changing skills required of audit and accounting professionals (Bollen, Meuwissen, & Hassink, 2010). This overview underscores the potential significance of forensic accounting practice and education.

4.3 Forensic Accounting Profession and Definition

Whilst the new millennium with its financial scandals and the global financial crisis (GFC) has increased public awareness of fraud and forensic accounting activities, forensic accounting itself is not new. It can be traced back to ancient Egypt where, according to Wells (2000), the main purpose of monitoring the grain and gold inventory of the Pharaohs was to prevent fraud. However, Ancient Egypt is not the only reference to forensic accounting that history offers. Crumbley (2001) posited that investigative accounting can be traced back to an 1817 court case in which a Canadian accountant acted as an expert witness. The most famous historical reference to an accountant performing forensic-type work can, according to Rufus et al. (2015), be found in the 1930 tax evasion case against the gangster, Al Capone.

Despite the growing interest in forensic accounting work and its age-old history, Heitger and Heitger (2008) thought academia lacked “understanding and appreciation” (p. 561) of forensic accounting, both as a profession and as a field of practice, a sentiment echoed by McMullen and Sanchez (2010) who claimed, “there is little academic research to date in this area” (p. 31). Huber (2012) used the fact that the term forensic accounting is ill-defined as a further example of the lack of academic interest in a growing area of accounting. Maurice Peloubet first used the term forensic accounting in a (1946) article entitled *Forensic Accounting: Its Place in Today's Economy*. Since the publication of Peloubet's seminal article, some researchers (e.g., Williams, 2002; Kasum, 2009; Stansbury & Menzies, 2010; Botes et al., 2015) have tried to define forensic accounting. Definitions have moved from abstract discussions about forensic accounting to technical discussions of the role and practice of forensic accounting.

Despite efforts to define the term forensic accounting, Huber (2012) stated that definitions varied, were inconsistent, and, at times, contradictory. Williams (2002), for example, saw the term as encompassing a particular form of professional expertise whereby a specific attribute comes from possessing official certification which provides symbolic value. Kasum (2009) saw forensic accounting as the integration of accounting, auditing, and investigative skills. Stanbury and Menzies (2010) made a distinction between forensic accounting and fraud investigation and

suggested that the scope of forensic accounting has expanded to cover areas including, but not limited to: intellectual property; business interruption; breach of warranty; and, shareholder/partnership disputes.

A brief overview of the literature suggests that forensic accounting is mostly defined intuitively and that definitions are approached in three different ways following a narrow, a semibroad, and a broad focus, as illustrated in Table 4.3's examples. These traditional approaches to defining forensic accounting will be explored in more detail in this section.

Table 4.3: Definitions of forensic accounting

The Approach	Author	Definition of forensic accounting
Narrow approach	Shim & Siegel (2001, p. 465)	Forensic accounting is a science dealing with the application of accounting facts gathered through auditing methods and procedures to resolve legal problems.
Semibroad approach	Rezaee, Crumbley, & Elmore (2004, p. 195)	The practice of rigorous data collection and analysis in the areas of litigation support consulting, expert witnessing, and fraud examination.
Broad approach	The American Institute of Certified Public Accountants (AICPA, 2010, p. 2)	Services generally involve the application of specialised knowledge and investigative skills possessed by CPAs to collect, analyse, and evaluate evidential matter, and to interpret and communicate findings in the courtroom, boardroom, or other legal or administrative venues.

Source: Author

4.3.1 Narrow approach.

The in-courtroom role that investigative accountants play (Dykeman, 1982; Peloubet, 1946) spawned some of the literature's first definitions of forensic accounting. The first book that explored forensic accounting appeared in 1982. In Dykeman's (1982) book, the definition of forensic accounting was shorthand for the in-courtroom role that investigative accountants occupy. The Merriam-Webster dictionary (2014) defined the term forensic as "belonging to, used in, or suitable to courts of judicature or to public discussions and debate", while Shim and Siegel (2001) referred to forensic accounting as a "science dealing with the application of accounting facts gathered through auditing methods and procedures to resolve legal problems" (p. 465). Furthermore, Shim and Siegel (2001) saw legal issues as the only outcome of forensic accounting. Additionally, definitions such as these appear

to concentrate narrowly on results in litigation services and the skill and technique in forensic accounting methods. Although the narrow view of forensic accounting dominated the literature until the beginning of the 1990s, over the last 2 decades, usage of the term seems to have changed in response to large-scale corporate scandals and the growing need for antifraud experts.

4.3.2 Semibroad approach.

Albrecht et al. (2016) indicated that forensic accounting is now associated more with an investigative accountant with a suspicious mind and a detective style. Others (Gray, 2008; Kasum, 2009; McMullen & Sanchez, 2010) have focused on the vital role of forensic accounting as an investigative tool and widened the definition of forensic accounting away from a narrow in-courtroom focus. Dorrell and Gadawski ((2012) described forensic accounting succinctly as the art and science of investigating people and money. Keskin and Ozturk (2013) defined forensic accounting as “a science which allows obtaining accounting realities through the application of audit method and procedures to legal problems in financial characteristics” (p. 729), and Rezaee et al. (2004) echoed that thinking when they described forensic accounting as “the practice of rigorous data collection and analysis in the areas of litigation support consulting, expert witnessing, and fraud examination” (p. 195). Rezaee et al.’s definition (2004) was one of the few definitions which viewed forensic accounting as a fraud investigation tool. However, while their definition implies that forensic accounting occupies both a detective and preventative role, it ignores forensic accounting’s internal control role, which aims to prevent and protect against fraud.

4.3.3 Broad approach.

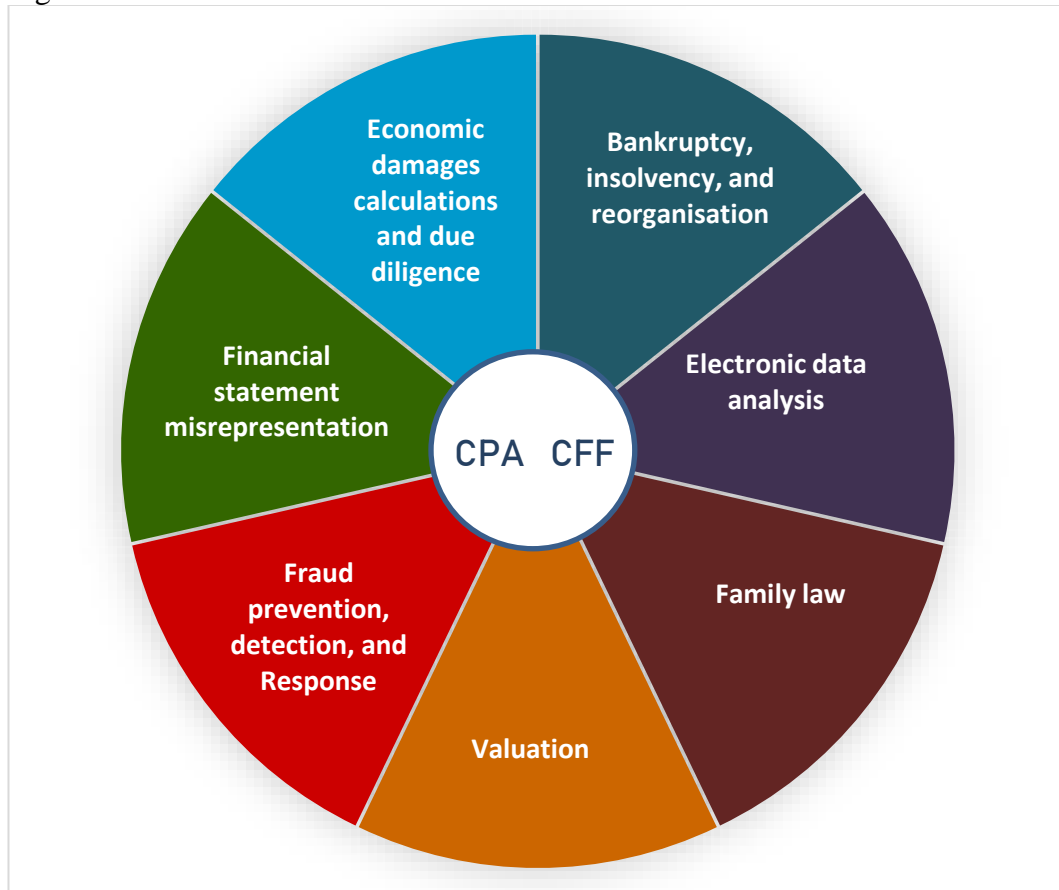
Over the last decade, forensic accounting has come to be defined more in line with the outcomes applicable to a range of different contexts. Definitions of this nature seem to indicate a semibroad approach to defining forensic accounting based on its results, while at the same time confining the definition of forensic accounting to methods and techniques.

Bologna and Lindquist (1995) offered yet another focus when they described forensic accounting as:

the application of financial skills, and an investigative mentality to unresolved issues, conducted within the context of rules of evidence. As a discipline, it encompasses financial expertise, fraud knowledge and a sound knowledge and understanding of business reality and the working of the legal system. Its development has been primarily achieved through on-the-job training, as well as experience with investigating officers and legal counsel. (p. 47)

The Association of International Certified Professional Accountants (AICPA, 2011) supported this wider and deeper portrayal, describing forensic accounting as “services which generally involve the application of specialised knowledge and investigative skills possessed by CPAs to collect, analyse, and evaluate evidential matter, and to interpret and communicate findings in the courtroom, boardroom, or other legal or administrative venues” (p. 2). Based on the AICPA’s (2011) definition, the scope of forensic accounting covers areas that include forensic analysis, family law, valuation, economic damage calculations, and fraud examination, as demonstrated below (see Figure 4.1) in the AICPA's core focus wheel of its Certified in Financial Forensics (CFF) certification.

Figure 4.3: The AICPA's CFF core focus wheel.



Source: Adapted from AICPA (2013, p. 7)

The literature introduced several reformulations of this definition, a prominent example being PricewaterhouseCoopers' (PwC) (2016) definition of forensic accounting as "the application of the skills and training of a chartered accountant to investigations, disputes and other reviews, the result of which could end up in a court of law" (n.p.). PwC's definition overcame most of the disadvantages of definitions offered under the narrow and semibroad approaches, as it comprehensively described forensic accounting methods and determined forensic accounting outcomes.

Both the PwC and AICPA definitions, however, have limitations, as they restrict the skills needed by forensic accountants to those possessed by Chartered Accountants (CAs) or Certified Public Accountants (CPAs). The limited research in the field has improved understanding of the practical application, form, and characteristics of forensic accounting. For example, Rezaee et al. (2004) and Daniels et al. (2013) focused on survey studies that examine the perception of

academics and practitioners regarding the importance, relevance, and delivery of forensic accounting education, while McMullen and Sanchez (2010) investigated the skills and education required to train forensic accountants. Luke (2013) and Alabdullah et al. (2014) examined the role of forensic accountants in detecting and preventing fraud and Dykeman (1982) considered the forensic accountant as an expert witness. Efiong (2012) and Williams (2002) extended the forensic accounting knowledge base by focusing on cultural and contextual influences on forensic accounting practice and education. The research indicated that forensic accountants, in practice, need a wider range of skills and knowledge than those suggested in the definitions offered by PwC and AICPA.

As the narrow, semibroad, and broad approaches all had shortcomings, the remarks in this section have been used to ascertain the components which were lacking in the existing definitions and to propose a new definition for forensic accounting, as follows: *Forensic accounting is the application of financial expertise, investigative skills, and legal knowledge to undertake fraud examinations, advisory services, investigate disputes, and other reviews, the result of which could lead to a court of law appearance.*

4.4 Forensic Accounting Education

Research related to forensic accounting education can be classified into two main areas. The first area consists of studies centred on the importance and relevance of forensic accounting education. American and international standard setters have called for stronger forensic skills in those who perform auditing works (Imoniana, et al., 2013; Rezaee et al., 2004). Imoniana et al. (2013) indicated that the external auditor's role in fraud detection takes a new turn when the statement of Auditing Standards (SAS) No. 99 and the Sarbanes-Oxley Act (SOX) are applied. Imoniana et al. (2013) explained that SAS No. 99 has increased the auditors' responsibility for detecting the risks of fraud during the process of conducting audits of financial statements. This responsibility, in turn, has led to increased demand for entry-level practitioners and professionals who possess greater knowledge and skills related to fraud prevention and detection (Carnes & Gierlasinski, 2001; Rezaee et al., 2004; et al., 2016).

Bollen et al. (2010) stressed that “it is difficult for individual auditors to build up expertise in fraud detection“ and emphasised the need for “specific training programs for auditors to help them to detect fraud” (p. 861). Similarly, Mazumder (2011) argued that forensic accounting education is increasingly viewed as being fruitful and beneficial to accounting students, the accounting profession, the business community, and accounting programmes. Luke (2013) surveyed a number of auditors working with reputable accounting firms, legal luminaries, and computer experts and concluded that forensic accounting courses should be added into the accounting curriculum in all tertiary institutions as a compulsory course. However, Rezaee et al. (2004) noted a very slow change in accounting curricula to meet the large and growing demand for forensic accountants. The main reason for this slow pace of change to accounting curricula, according to Rezaee et al. (2004), is not having enough room in the curriculum to include additional topics.

According to Rezaee et al. (2004), a limited number of universities globally are offering forensic accounting courses or programmes; these, however, do not meet the demand for forensic accounting. Similarly, a report submitted to the U.S. Department of Justice by West Virginia University (2007) asserted that the coverage of fraud investigation and forensic accounting topics in traditional texts is relatively scant. Pearson and Singleton (2008) argued that the academic accounting world suffers from a dearth of faculty members who are academically qualified in forensic accounting. This problem, according to Pearson and Singleton (2008), is a major obstacle facing academic institutions that attempt to develop and provide forensic accounting education programmes.

Burton (1997) suggested two important issues in developing forensic accounting education. These are: the room for forensic accounting in current accounting curricula and the content of forensic accounting education. Carnes and Gierlasinski (2001) criticised current accounting and audit texts, arguing that they include very little coverage of the skills that auditors need to identify events in which fraud has occurred. Kleinman and Anandarajan (2011) suggested that a successful forensic accounting programme demands special and important characteristics such as the inclusion of professional skills in the forensic accounting classroom and professors

interested in this field (Fleming, Pearson, & Riley, 2008) along with comprehensive texts. Kleinman and Anandarajan (2011) mentioned the weak coordination between business schools and practising accountants as another major issue.

The second area of research consists of survey studies that examine the perception of academics and practitioners regarding the content and delivery of forensic accounting education. According to Rezaee et al. (2004), forensic accounting education has evolved from being limited to professional education courses for practising accountants to the current state of being offered as study materials and papers by several universities. A study conducted by Rezaee and Burton (1997) was conducted with 196 academicians and 213 Certified Fraud Examiners (CFEs). At the conclusion of the study, both groups of respondents agreed that forensic accounting education should be included in the future accounting curriculum. However, their opinions differed in terms of their preferred methods of delivery. While CFE practitioners asserted that forensic accounting should be taught as a separate course, academics preferred integration of forensic accounting topics within the scope of existing accounting and auditing lectures (Rezaee & Burton, 1997).

Many researchers have pointed out several important skills and characteristics that forensic accountants ought to possess in order to accomplish their supposed role (e.g., DiGabriele, 2007; Davis, Farrell, & Ogilby, 2010). McMullen and Sanchez (2010) investigated practising fraud and forensic professionals to investigate the importance of a list of forensic accounting skills and characteristics as perceived by the profession. These features are: basic accounting skills; education; communication skills; analytical skills; prior audit experience; personality traits; computer forensic skills; knowledge of criminal law; interview skills; and, professional designations. They found that all the skills investigated in their study are potentially important for forensic accountants in varying degrees and universities should consider this point when designing curricula (McMullen & Sanchez, 2010).

West Virginia University (2007) initiated a project¹⁵ to develop a model curriculum in fraud and forensic accounting. To achieve this aim, a technical working group that represented a wide spectrum of forensic accounting stakeholders, including academics, professional firms, industry organisations, and government agencies, was created (West Virginia University, 2007). The model curriculum guidelines identified three primary content areas for the curriculum, namely criminology, fraud examination, and forensic and litigation advisory services. In addition, the model curriculum guidelines provided recommendations for teaching techniques and tools and assessment mechanisms (West Virginia University, 2007). Table 4.4 provides an overview of the West Virginia University fraud and forensic accounting model curriculum.

Table 4.4: An overview of West Virginia University's fraud and forensic accounting model curriculum

Primary content areas
1. Criminology; legal, regulatory, and professional environment; ethical issues Theories of crime causations Overview of the civil, criminal, and regulatory system and acts Corporate governance mechanisms Theories of business ethics 2. Fraud and forensic accounting Asset misappropriations, corruption, and false representations Financial statements fraud Fraud and forensic accounting in a digital environment 3. Forensic and litigation advisory services Definition of fraud and litigation services Overview of services Research and analysis Damages and valuations Working papers Reporting
Teaching tools and techniques
1. Hands-on activities Moot court exercises Data mining extraction and analysis Simulated cases and investigations Fraud reporting exercises based on case details and fact patterns 2. Course material Textbooks Case studies and general discussion cases Videos Software Cases that include review and evaluation of general ledger entries, source documents, cancelled checks, bank statements etc. 3. Fraud and forensic accounting internship
Assessment mechanisms

¹⁵ This project was funded by a US\$614,000 award from the National Institute of Justice to West Virginia University's Division of Accounting to develop a model curriculum in fraud and forensic accounting (West Virginia University, 2007).

- | |
|--|
| <ol style="list-style-type: none">1. The ability of students to obtain and retain entry-level employment2. Observations and evaluations of oral and written reports, moot courts, and other class assignments by outside subject matter experts3. Projects4. Exams5. Other assignments |
|--|

Source: Adapted from West Virginia University (2007, p. 17).

While the West Virginia University's model curriculum may be instrumental in providing guidance to colleges and course developers in terms of content selection and organisation, it places only a marginal focus on instructional strategies and assessment strategies and practices. In addition, the extent to which the West Virginia University's model is relevant and applicable in different cultural contexts is debatable. By constructing a culturally and contextually specific framework for forensic accounting education, the present study, therefore, contributes to practical knowledge in this area.

Some researchers (e.g., Bierstaker 2009; Efiog, 2012; Salleh & Ab Aziz, 2014; Williams, 2002) have focused on cultural and contextual influences on forensic accounting education. Efiog (2012) and Williams (2002) indicated that, in addition to focusing on skills directly relevant to forensic accounting education such as the curriculum design, business schools should consider those skills that indirectly relate to the discipline's functioning in the particular contexts of different countries in terms of problem solving and investigative and deductive skills. Salleh and Ab Aziz (2014) argued that a combination of technical forensic accounting expertise and ethical values is essential for forensic accountants. They conducted a survey of academics, practitioners, and users of forensic accounting services in Malaysia to determine the important traits and values for public sector forensic accountants in Malaysia. Salleh and Ab Aziz (2014) found that promoting the Islamic values of integrity, trustworthiness, accountability, transparency/honesty, and discipline through training and education has the potential to reduce financial fraud and corruption in the Malaysian public sector.

4.5 Forensic Accounting in a Cultural Context

Social and behavioural research indicates that social values and culture strongly influence both personal behaviours and an individual's perception of ethical

situations (Bierstaker, 2009; Rashid & Ibrahim, 2008; et al., 1993). Moreover, research (e.g., Al-Lawatia, 2004; Brytting et al., 2011; Cieslewicz, 2012) has suggested that culture affects what societies perceive as an appropriate response to fraud and unethical behaviour. Consequently, culture may influence public perception and attitudes toward forensic accounting, both as a term and a profession.

Three different types of implications for culture in Jordan can be identified in relation to forensic accounting. First, as perception is in part socially constructed (Hofstede, 1980), culture affects one's perception of behaviour as either normal and acceptable or corrupt and unethical (Tlaiss & Kauser, 2011). For instance, Barnett, Yandle, and Naufal (2013) explained that while *wasta* (nepotism) is considered to be a form of corruption by Westerners, it may be regarded as social connections that are morally acceptable in Arab countries, including Jordan. Sidani and Thornberry (2013) made clear that Western countries, in general, have rule-based cultures where they organise their interactions around agreements enforced by a legal system. On the other hand, Arab cultures are relationship-based and, thus, individuals tend to organise their interactions around human relationships that are cemented by personal honour and friendship (Tlaiss & Kauser, 2011). This culture encourages individuals to employ a relational framework rather than a moral framework when interpreting corruption (Berger, Silbiger, Herstein, & Barnes, 2015). In this sense, a bribe may be viewed as a gift, from a relational point of view, and nepotism can be interpreted as 'benefitting the ingroup', which may be judged as a duty that may override the moral concern about being unfair (Nichols & Robertson, 2017).

Second, culture plays a significant role in the way people define fraud and its causation (Hassan & Lewis, 2014). The meanings attributed to fraud and its causation draw on changes in another factor: the individual's perceptions of how best to solve fraud problems (Nahar & Yaacob, 2011). As discussed in the theoretical framework, while Islam and the West agree that fraud is a problem, they differ significantly with regard to the nature and causes of this problem. In Islam, fraud is not so much a governance issue as a moral problem that arises from a lack of ethical reasoning and self-monitoring (Hassan & Lewis, 2014). This point of view, in turn, would imply that the suggested solutions to fraud problems would be

centred around moral development and character formation rather than around enhancing governance (see section 3.4 for a related discussion).

Third, culture affects the way that individuals respond to and penalise unethical practices. For instance, the culture in Jordan demands that people, and particularly women (see section 2.3 for a discussion on culture and role of women in Jordan), do not lose face (respect, dignity, or honour) or are not publicly embarrassed (Becker & El-Said, 2013). Losing face is a sensitive issue that Jordanians take seriously, as it can result in damaged relationships and in conflicts between the families or tribes of the disputing parties (Al-Makhamreh & Sullivan, 2013). Indeed, it is not uncommon for those who feel they have lost face to seek revenge (Watkins, 2014). Hence, the principle of ‘saving face’ and the potential consequences of ‘losing face’ have a direct impact on the response to fraud in Jordanian society. For example, instead of reporting a fraud or making it public, Jordanians would generally prefer to deal with the issue quietly. Dealing with fraud can usually be done by ‘admonishing’ the perpetrator in private and seeking a confidential settlement that compensates for the damage while also preserving the face of the perpetrator (Brandstaetter, Bamber, & Weir, 2016; Lutfiyya & Churchill, 2012). In this context, ‘social cost’ and ‘reputational penalties’ can serve as both a powerful deterrent and social punishment mechanism (Engelen & van Essen, 2012; Sampath, Gardberg, & Rahman, 2016). The consideration of the cultural context of the stakeholders is, thus, critical in terms of the effectiveness and cultural appropriateness of forensic accounting services and for teaching forensic accounting in Jordan. Implications of culture in Jordan in relation to forensic accounting are explored more fully in chapters 7 and 8.

4.6 Summary and Research Gap

Frequent high-profile cases involving fraud and financial scandals raise concerns about the credibility of financial reports, cast doubt on the roles of auditors, and highlight the significance of forensic accounting. Although the auditing profession has recently accepted greater responsibility for fraud detection and reporting (e.g., SAS No. 99 and SOX of 2002), an expectation gap still appears to exist. The general public expects that an audit will guarantee the accuracy of financial statements and

discovery of all frauds and irregularities, whereas the auditing profession expects an audit to provide 'reasonable' assurance that the financial statements are free of 'material' misstatements, whether due to fraud or error. The terms 'reasonable' and 'material' are critical here, because 'absolute' assurance, from the auditing profession's point of view, is not possible. This expectation gap arises largely from a combination of misconceptions on the part of users and the limitations of the traditional audit methods in identifying fraud, coupled with a general lack of forensic accounting knowledge and skills among accounting and auditing professionals.

Material misstatement resulting from fraud is more difficult to detect than one resulting from error, because fraud, by its very nature, involves deception and is likely to be invisible and, thus, extremely hard to detect. Hence, as expressed in ISA 240, auditors need to be proactive and innovative in searching for fraud and must maintain an attitude of professional scepticism. Furthermore, auditors must be vigilant for any signs (fraud risk factors) that might indicate the presence of any element of the fraud triangle (that is, perceived pressure to commit fraud, perceived opportunity to facilitate fraud, and rationalisation to condone the unethical action). In this sense, it might be said that forensic accounting knowledge and skills are a requirement in that they prepare accounting professionals to deal with fraud effectively and to meet the public's expectations.

Forensic accounting as a term and as an accounting discipline has grown significantly over the past decade (Luke, 2013). The term itself has experienced a surge in usage since 2008, due largely to issues of accountability and fraud stemming from large-scale corporate collapses and global financial scandals (Solnik, 2008). Despite the growth of forensic accounting as a field of accounting practice (Matson, 2016), there is a lack of understanding and appreciation within academia of forensic accounting, both as a term and a profession (Huber, 2012). Part of the problem lies in the fact that there is no one clear definition which encompasses all the various aspects of the work of forensic accountants. The definitions of the term 'forensic accounting' vary and are inconsistent, which would suggest that the concept is continuing to evolve (Heitger & Heitger, 2008).

While there is an extensive body of literature related to fraud, in general, and financial reporting fraud, in particular (see Trompeter et al. (2012) for a summary), there is relatively little research related to forensic accounting. Furthermore, a gap appears to exist between the demand for forensic accounting and the supply of forensic accountants through higher education and professional training (Heitger & Heitger, 2008; Rezaee et al., 2016). This gap may be particularly large in developing countries, including Jordan, where fraud and corruption are widespread, the rule of law is weak, and anticorruption measures are ineffective (see section 2.2) (Susser, 2013).

Different stakeholders have different perspectives on, interests in, and definitions of forensic accounting. In this review of the literature, three different approaches to defining forensic accounting were identified. These three approaches could be described as a narrow, a semibroad, and a broad approach. The narrow approach has a legalistic focus and specifies the application of forensic accounting methods and techniques to resolve legal problems. The semibroad approach moves towards describing forensic accounting more in terms of outcomes applicable to not only the legal, but also to other, different environments, while still confining the definition to forensic accounting methods and techniques. The broad approach presents an extensive and in-depth portrayal of forensic accounting, but in doing so tends to describe rather than define the term and to limit forensic accounting services to those provided by CAs or CPAs. Therefore, to comprehensively define forensic accounting, a holistic approach that encompasses various forensic accounting stakeholder expectations is required. Following this approach, this study proposes a new definition of forensic accounting as *'the application of financial expertise, investigative skills and legal knowledge to undertake fraud examinations, advisory services, investigate disputes, and other reviews, the result of which could lead to a court of law appearance'*. This definition does not limit forensic accounting to the accounting profession only and encompasses the multidisciplinary nature of the field (Kumari Tiwari & Debnath, 2017) by referring to the financial, legal, and investigative skills required. The outcomes of forensic accounting, according to this definition, are also not just legalistic, as it foresees that forensic accounting can also include advisory services, dispute resolution, and other reviews.

The body of forensic accounting education literature that has emerged over the last 20 years has mirrored the expanding scope, and the evolving concept, of ‘forensic accounting’. A number of articles have focused on the growing demand for entry-level professionals with greater fraud awareness and understanding of forensic accounting. Major financial reforms and increased legal and regulatory requirements following financial scandals and the GFC have led to exponential growth in the demand for accountants in the area of forensic accounting (Matson, 2016). Universities, in general, are rather weak in responding to this demand with programmes designed to improve students’ understanding of fraud issues and forensic accounting. Barriers to the adoption of forensic accounting education include the lack of qualified academics and finding room for forensic accounting in current accounting curricula.

While a few survey studies (e.g., Daniels et al., 2013; Kramer et al., 2017; Rezaee et al., 2004) have tried to explore the knowledge and skills required of forensic accountants from an educational point of view, the importance of cultural and contextual factors has often been overlooked. Culture has a strong impact on behaviour, expectations, and attitudes towards fraud and corruption across societies, which necessitates the development of culturally sensitive and applicable forensic accounting norms and procedures. In addition, the unique nature of the challenges facing accounting education in developing countries, including Jordan, requires unique solutions. Hence, understanding cultural and contextual influences is essential to identifying the appropriate forensic accounting course objectives and design. This understanding involves more than a finite knowledge of attributes, values, beliefs, thoughts, and behaviours. The need to gain relevant insight necessitates the need to develop a certain amount of cultural awareness, competence, and sensitivity. Such a task is likely to require a participatory research approach that engages stakeholders in identifying problems, setting goals, and designing solutions and the use of qualitative research methods that capture the insider perspective of stakeholders.

The following chapter reviews the research methodology and design of this study.

Chapter 5

Research Method and Methodology

5.1 Introduction

Chapter 1 highlighted the critical need for research into forensic accounting practice and education in the Jordanian context in order to fill the gap between forensic accounting demand and supply. The Jordanian context in terms of demography, politics, economy, religion, culture, and education has been explored in chapter 2 to pave the way for understanding the particular requirements in relation to forensic accounting practice and education in Jordan. By drawing on stakeholder theory and the Islamic perspective on education, chapter 3 discussed how cultural and ideological differences must be considered when developing a forensic accounting programme in Jordan. Chapter 4 reviewed the literature surrounding forensic accounting, which included an overview of the landscape of forensic accounting, forensic accounting profession and definition, as well as the perception of academics and practitioners regarding the content and delivery of forensic accounting education.

The aim of the research presented in this study is to develop a framework for a forensic accounting education compatible with Jordan's unique culture and business environment. This chapter describes the methodology and specifies the techniques of the study. This chapter is divided into nine sections. Following the introduction, the objectives of the study and the research questions are presented in section 5.2. Positivist and social constructionist considerations are outlined in section 5.3. Section 5.4 introduces the pragmatic paradigm and explains why this study uses a pragmatic paradigm to guide the research. Section 5.5 explicates the design of this research. Section 5.6 outlines the research methods and provides a detailed discussion of the interview procedures and data analysis. Section 5.6 discusses issues related to the quality of research and outlines the considerations relating to quality that were followed in this research. The limitations of the research are outlined in section 5.7, followed by a presentation of ethical considerations in

section 5.8. The final section closes the chapter with a summary of the main issues discussed.

5.2 The Research Problem, Questions, and Objectives

Most research in the field of forensic accounting education investigates the relevant skills of forensic accountants regardless of the cultural context (e.g., DiGabriele, 2007; Davis et al., 2010; McMullen & Sanchez, 2010). This study takes a different perspective by aiming to explore forensic accounting requirements in the context of Jordan. Furthermore, forensic accounting is in its developmental stage, with relatively little research undertaken in this field. Thus, studies in this area are exploratory in nature, which is reflected in the nature of the research objectives and questions.

Research Objective

1. To develop a framework for forensic accounting education compatible with Jordan's unique culture and business environment.

Research Questions


1. What incentives and barriers surround forensic accounting education in Jordan?
 - What is the current state of forensic accounting practice and education in Jordan?
2. What reforms are necessary to develop forensic accounting practice and education in Jordan?
3. What should the framework for forensic accounting education in Jordan be?

5.3 The Philosophical Assumption: Social Construction of Reality

This research involves the study of social phenomena related to human behaviour, culture, and education within a particular cultural context. To understand philosophical assumptions related to social phenomena Burrell and Morgan (1979) have suggested a framework consisting of four paradigms: functionalism, interpretivism, radical humanism, and radical structuralism. Each of the prescribed

paradigms is based on separate explicit, mutually exclusive assumptions related to ontology, epistemology, human nature, and methodology (see Table 5.1). Similarly, according to Easterby-Smith, Thorpe, Jackson, and Lowe (2008), management research has two major philosophical paradigms, either positivism or social constructionism. Although these two paradigms view knowledge from the same perspective, as human investigation and experience demonstrate, they differ in their perception of the nature of reality and the way in which it can be assessed Ritchie et al. (2014).

Table 5.1. Network of basic assumptions characterising the subjective-objective debate

	Subjectivist Approaches to Social Science					Objectivist Approaches to Social Science
						
Assumptions about Human Nature	Man as pure spirit, consciousness, being	Man as a social constructor, the symbol creator	Man as an actor, the symbol user	Man as an information processor	Man as an adaptor	Man as a responder
Core Ontological Assumptions	Reality as a projection of human imagination	Reality as a social construction	Reality as a realm of symbolic discourse	Reality as a contextual field of information	Reality as a concrete process	Reality as a concrete structure
Basic Epistemological Stance	To obtain phenomenological insight, revelation	To understand how social reality is constructed	To understand patterns of symbolic discourse	To map contents	To study systems, process, change	To construct a positivist science
Some Favoured Metaphors	Transcendental	Language game, accomplishment, text	Theatre, culture	Cybernetic	Organism	Machine
Research Methods	Exploration of pure subjectivity	Hermeneutics	Symbolic analysis	Contextual analysis of Gestalten	Historical analysis	Lab experiments, surveys

Source: Morgan and Smircich, 1980.

The positivist paradigm generally refers to the use of biological or mechanical analogies to model and understand the social world (Easterby-Smith et al., 2008). The positivist paradigm is derived from physical science and is characterised by the examination of hypotheses developed from existing theory through the measurement of observable social phenomena (Morgan & Smircich, 1980). Positivists argue that the social world exists externally and its properties should be measured through objective methods rather than being inferred subjectively through

sensation, reflection or intuition (Denzin & Lincoln, 1994). Hence, the positivist paradigm aligns with a quantitative approach and deductive or theory testing (Neuman, 2002).

In contrast, a social constructionist approach assumes that knowledge is created, not discovered, by human beings (Morgan & Smircich, 1980). In addition, social constructionism conceives of a world where there are multiple realities based on individuals' construction of reality over time (Denzin & Lincoln, 1994). Another important assumption of social constructionism is that it views culture as the source of human behaviour, not as its result. In this paradigm, social researchers usually apply qualitative techniques such as in-depth and focus group interviews and participant observation, in order to gain a deeper understanding of the participants' standpoint (Easterby-Smith et al., 2008). Table 5.2 presents the main differences between the positivist and social constructionist paradigm.

Table 5.2. Key features of positivism and social constructionism

	Positivism	Social Constructionism
Role of observer	must be independent, minimal and irrelevant	is always part of the process and what is being observed
Human interests	should be irrelevant	are the main drivers of science
Explanations	must demonstrate causality	aim to increase general understanding of the situation
Research progresses through	hypotheses and deductions to test	gathering rich data from which ideas are induced, case study based
Concepts	need to be operationalised so that they can be measured	should incorporate stakeholders' perspectives
Units of analysis	should be reduced to simplest terms	may include the complexity of whole situations
Generalisation through	statistical probability, tight conclusions about findings, generalisable	theoretical abstraction, defined, and focus on process not outcome, answer why, but empirically rich in detail
Sampling requires	large numbers selected randomly	small numbers of cases for specific reasons

Source: Adapted from Easterby-Smith et al., 2008.

Easterby-Smith et al. (2008) argue that research can rarely be classified neatly into the positivist or social constructionist approach. According to Easterby-Smith et al. (2008), business and management researchers often apply a mixture of both. Torrance (2012) argues that the collection of multiple data using different strategies and approaches can limit the bias and increase the validity of research that uses only a single method, be it either quantitative or qualitative. The combination of more

than one research strategy, approach, or worldview in a study of the same phenomenon is called ‘pragmatism’.

5.4 The Research Approach: Pragmatism

Although the distinction between qualitative and quantitative approaches may be clear at the philosophical level, the distinctions between both often break down when it comes to the choice of the research design (Bryman, 2003). While pragmatism is often linked with mixed methods research, many researchers (e.g., Johnson, Onwuegbuzie, & Turner, 2007; Morgan, 2014) argue that pragmatism is one of the most appropriate and useful paradigms for social science research in general. Morgan (2014) (internal citations deleted) explains that

At issue here is the idea that pragmatism is somehow uniquely related to MMR [mixed methods research]. This confusion is reminiscent of some paradigmatic claims that qualitative methods must be connected to constructivism and quantitative methods must be connected to post-positivism. In all of these cases, there may be an affinity between paradigms and methods, but there is no deterministic link that forces the use of a particular paradigm with a particular set of methods [...]. The argument here is that pragmatism can serve as a philosophical program for social research, regardless of whether that research uses qualitative, quantitative, or mixed methods. As a new paradigm, it replaces the older philosophy of knowledge approach, which understands social research in terms of ontology, epistemology, and methodology. This claim to be a new paradigm rests on demonstrating the broader value of pragmatism as a philosophical system, along with its immediate practicality for issues such as research design. (p. 1045)

Similarly, Johnson and Onwuegbuzie (2004) argue that pragmatism finds a middle ground between paradigmatic incommensurability and provides a rationale for combining the methods from diverse paradigms. Pragmatists subscribe to the philosophy that the research question(s) should drive the process of designing the most appropriate research approach (Onwuegbuzie & Leech, 2003). Table 5.3 provides a framework for describing what the pragmatic approach can offer social science methodology.

Table 5.3. A pragmatic alternative to the key issues in social science research methodology

	Qualitative approach	Quantitative approach	Pragmatic approach
Connection of theory and data	Induction	Deduction	Abduction
Relationship to research process	Subjectivity	Objectivity	Intersubjectivity
Inference from data	Context	Generality	Transferability

Source: Adapted from Morgan (2007, p. 71)

The comparison between the qualitative and quantitative approach is a well-worn topic in textbooks on research methods (Madey, 1982; Amaratunga, Baldry, Sarshar, & Newton, 2002). In contrast, there is currently less consensus about the various purposes, procedures, and consequences related to adopting a pragmatic approach (Onwuegbuzie & Leech, 2003). Table 5.3 compares these three forms of research according to three basic distinctions: 1) qualitative research is typically inductive, subjective, and contextual; 2) quantitative research is typically deductive, objective, and general; 3) pragmatic research is typically abductive, intersubjective, and transferable (Easterby-Smith et al., 2008; Morgan, 2007).

The distinction between inductive and deductive approaches to connecting theory and data is one of the key features that distinguish research approaches (Tashakkori & Teddlie, 2003). In an inductive approach to research, researchers start by collecting data and looking for patterns in the data (Morgan, 2007). Moving from a set of observations, researchers work to develop theory or generate hypotheses that could explain those patterns (Creswell, 2009). In other words, researchers move from the specific to reach a general conclusion (Easterby-Smith, et al., 2008; Morgan, 2007). In contrast, researchers taking a deductive approach begin with theories and hypotheses that they find compelling and which they then evaluate through observations (Martela, 2011). That is, they move from a more general level (the theory) to a more specific one (the data) (Creswell, 2009). Moreover, the inductive process is oriented to discovery and exploration, while the deductive process is oriented to cause and effect associations (Crowther & Lancaster, 2009).

Martela (2011) argues that the traditional choice between the inductive and deductive approach, where the researcher starts from theory-free facts or fact-free theory, seems inappropriate. According to Martela, something more than pure induction or pure deduction is necessary in order to interpret and generate new value

from the data. Morgan (2007) goes further, arguing that “during the actual design, collection, and analysis of data, however, it is impossible to operate in either an exclusively theory- or data-driven fashion” (p. 71). Therefore, research often cannot be described as either purely inductive or deductive (Bryman, 2006).

The pragmatic approach relies on abductive reasoning that moves back and forth between deductive (quantitative) and inductive (qualitative) reasoning (Easterby-Smith et al., 2008; Morgan, 2007). Marcio (2001) sees that both the inductive and the deductive approach to reasoning involves abduction at some point of the process (Morgan, 2014). The purpose of abductive inference is to arrive at the best available explanation taking the researcher’s observations, preunderstanding, and any other material available such as previous theoretical explanations about the phenomenon into account (Creswell, 2009). The use of abductive reasoning within pragmatism involves converting observations into theories and then assessing those theories through action (Morgan, 2007). Hence, abductive interference within pragmatic research allows the researcher “to further a process of inquiry that evaluates the results of prior inductions through their ability to predict the workability of future lines of behaviour” (Morgan, 2007, p. 71).

The pragmatic approach is consistent with NVivo, the computer assisted qualitative data analysis software (CAQDAS) program used in this study (Morgan, 2007; Niedbalski & Slezak 2016). As qualitative data analysis software that has features that facilitate the emergence of theory from the data, NVivo is often thought to be based on grounded theory and an inductive approach to research (Welsh, 2002). However, Niedbalski and Slezak (2016) suggest that using NVivo often requires the researcher to apply a mixture of an inductive and deductive approach through the coding process (see section 5.6.3).

Moving to the second row of Table 5.3, the distinction between subjectivity and objectivity is one of the key features that distinguishes qualitative and quantitative research (Morgan, 2007). Qualitative research pursues a set of purposes associated with subjectivity (Marcio, 2001). Subjectivity is often attributed to acknowledging the researcher’s own interpretive actions as well as the importance of meanings in the lives of the people understudy (Easterby-Smith et al., 2008; Morgan, 2007). At

the procedural level, the subjective purposes involve close, personal contacts that use the researcher as the instrument for recording observations and drawing conclusions (Martela, 2011). In contrast, quantitative research captures a set of purposes associated with objectivity. Researchers should reach similar results when using similar procedures within similar situations in order for their results to be properly considered objective (Morgan, 2007). The emphasis on objectivity typically leads to a concern with standardised and testable measurement and the aim to eliminate any personal biases, prior commitments or emotional involvement (Easterby-Smith et al., 2008; Morgan, 2007).

As the arguments around discussing the first row of Table 5.3 show, in terms of the impossibility of either purely inductive or deductive approach, it is just as hard to imagine what a purely subjective or purely objective approach would be (Tashakkori & Teddlie, 1998). According to Morgan (2007), “any practicing researcher has to work back and forth between various frames of reference, and the classic pragmatic emphasis on an intersubjective approach captures this duality” (p. 71). Intersubjectivity provides a shared ontological understanding of a single, real world in which all individuals have their own understanding of that world. Intersubjectivity recognises that meaning and understanding are based on one’s position of reference, but at the same time, they lie along a continuum of mutual intelligibility that is formed through social interaction. Hence, this mutual interpretation highlights the processes of communication and shared meaning that are central to any pragmatic approach (Tashakkori & Teddlie, 1998).

The final dualism shown in Table 5.3 distinguishes between knowledge that is either specific and context-oriented or universal and generalised. According to Saunders, Lewis, and Thornhill (2007), qualitative research places emphasis on specific and context-dependent knowledge, and, thus, qualitative researchers typically examine specific situations or sets of people in depth and detail. In contrast, the quantitative researcher places emphasis on more generalised knowledge through trying to understand larger numbers of people in ways that apply to a wider range of settings (Tashakkori & Teddlie, 1998). Once again, however, the pragmatic approach emphasises the advantage of and the need for working back and forth between the two extremes, where research results are either

uniquely specific to a particular context or highly generalised and applicable in every possible context and setting (Denzin, 2010; Morgan, 2014). The pragmatic approach overrides the debate about the possibility of generalisability to the investigation of transferability (Easterby-Smith et al., 2008; Morgan, 2007). The pragmatic approach offers an effective alternative through its focus on evaluating the factors that will potentially affect the usability of knowledge that has been gained using particular methods or approaches in different contexts (Morgan, 2007). Thus, the researcher argues that the pragmatic approach is consistent with the goal of this study.

The goal of this study is to explore what incentives and barriers surround forensic accounting education in Jordan, to investigate what reforms are necessary to develop forensic accounting practice and education in Jordan, and to develop a framework for forensic accounting education compatible with Jordan's unique culture and business environment. As discussed in the theoretical framework and literature review, the study argues that cultural and contextual factors play a central role in shaping perceptions, attitudes, and preferences and in explaining human behaviour. Thus, understanding cultural and contextual influences is essential to identifying and defining the problem and developing solutions. This mode of inquiry is consistent with the pragmatic paradigm and its philosophy, orientation to problem solving, and objectives (Denzin, 2010). The pragmatic approach views experiences as context-dependent and social in nature (Denzin, 2010). Morgan (2014, p. 1051) affirms that

research never occurs in a vacuum, so how it is influenced by the historical, cultural, and political contexts in which it is done? And how do our research communities come together to emphasize one way of doing things rather than another? We need to pay more attention to how these factors influence both the choices we make and the ways that we interpret the outcomes of those choices. This is the path that pragmatism proposes.

Hence, rather than metaphysical discussions about the nature of reality or truth, pragmatists call for "freedom of inquiry", where stakeholders are able to define the problems that matter most to them and address those problems in a way that is most meaningful to them in their particular context (Morgan, 2014). In particular,

pragmatism emphasises openness and freedom from generalisations, preconceptions or assumptions that would limit the possibilities for knowing and progressing (Strubing, 2007). John Dewey, a leading pragmatist (1859-1952), proposes a systematic process-based approach to knowledge in which inquiry is the defining process (Morgan, 2014).

This systematic approach can be summarised as follows:

1. Identifying and defining the problem.
2. Considering the significance and difference it makes to diagnosing the problem in a particular way;
3. Designing a possible strategy and line of action to address the problem;
4. Evaluating potential actions in terms of their likely consequences and taking appropriate actions.

Dewey's pragmatic approach to inquiry is almost identical to Taba's (1962) framework for curriculum development (see section 3.2.2) (Forest, Forest, & Kinser, 2002), which is hardly surprising because Taba was a student of John Dewey (Trezeise, 1972). Taba's (1962) framework, which is adopted in this study, can be summarised in terms of four systematic steps, as outlined in the following section.

5.5 The Design Process of the Forensic Accounting Framework Developed in this Research

The design process of the forensic accounting framework developed in this research follows Taba's framework for curriculum development, a framework which she also employed in her seminal textbook *Curriculum Development: Theory and Practice* (Taba, 1962). Taba organises her textbook into four parts. In Part I, she begins by building a conceptual understanding of the "foundations for curriculum development". She opens with a discussion of "the sources from which the ideas and criteria for curriculum decisions are derived", namely "function of the school in our [or any specific] society, ideas and information about society, concepts of learning and learners, the nature of knowledge, and the implications of each for curriculum" (p. 11). In using the pronoun 'our', Taba (1962) indicates that these

sources may look different across societies and may change over time. In a statement that is as relevant today as it was in 1962, Taba states:

not all cultures require the same kinds of knowledge. Nor does the same culture need the same kinds of capacities and skills, intellectual or otherwise, at all times [...]. An analysis of culture and society, thus, provides some guide for determining the main objectives of education, for selection of content, and for deciding what to stress in learning activities. (p. 11)

Part II deals with the process of curriculum planning. Here, Taba starts by highlighting the significance of the diagnosis of achievements, students as learners, and curriculum problems in curriculum development and revision. Taba believes that a continuous diagnosis of these three aspects is essential “to keep the curriculum in tune with the needs of the times and of students” (p. 11). Part II goes on to build a theory for the formulation of objectives of education and the criteria for selecting and organising content, learning experiences, and evaluation.

In Part III, Taba deals with problems related to the design of the curriculum. Here she offers a conceptual framework that, by addressing three central problems, guides the curriculum design process. These problems centre on the determination of the scope of expected learning, the establishment of a continuity of learning and proper sequence of content, and the unification of ideas from diverse areas. Finally, in Part IV, Taba develops a strategy for curriculum change and development and discusses the “problems of mobilising for the task of curriculum development and installation” (p. 10).

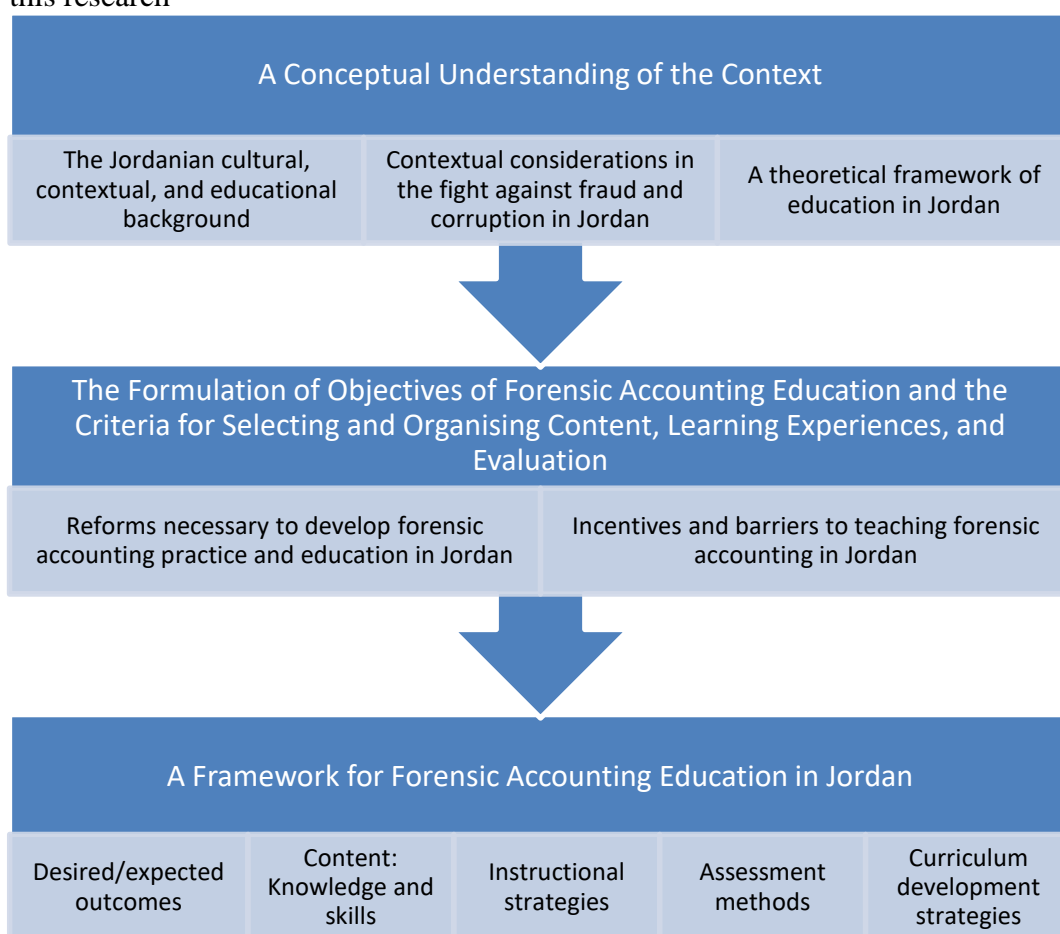
Based on Taba’s (1962) approach of “moving from the specific to the general” (Kridel, 2010, p. 838), the design of the forensic accounting framework developed in this research began in chapter 2 with an analysis of Jordan’s political, economic, educational, and cultural context, with sections 2.5 and 2.6 dealing specifically with the assessment of the current state of higher education and accounting and forensic accounting education in Jordan. To advance a theoretical framework of education in Jordan and a method of thinking about it, chapter 3 discussed the stakeholder concept in relation to education and reviewed various models of curriculum development theory. That chapter thereafter provided a commentary on the Islamic

philosophy of knowledge and education and Islam and forensic accounting. The discussions and analyses in chapters 2 and 3 provided a basis for developing a framework for forensic accounting education in a “rational and a scientific” approach, as Taba (1962, p. 10) explains in the following quotation:

All curricula, no matter what their particular design, are composed of certain elements. A curriculum usually contains a statement of aims and of specific objectives; it indicates some selection and organization of content; it either implies or manifests certain patterns of learning and teaching, whether because the objectives demand them or because the content organization requires them. Finally, it includes a program of evaluation of the outcomes. [...], if curriculum development is to be a rational and a scientific rather than a rule-of-thumb procedure, the decisions about these elements need to be made on the basis of some valid criteria. These criteria may come from various sources—from tradition, from social pressure, from established habits. The differences between a curriculum decision-making which follows a scientific method and develops a rational design and one which does not is that in the former the criteria for decisions are derived from a study of the factors constituting a reasonable basis for the curriculum.

In line with Taba’s approach, chapter 4 provided a review of the global literature relating to forensic accounting profession. It considered its definition, forensic accounting education, and forensic accounting in a cultural context, while the current chapter, chapter 5, outlines the research methodology and method. Chapters 6 and 7 continue to explore the implications of Jordan’s cultural and contextual environment in terms of forensic accounting practice and education. This part of thesis also involves further diagnosis of learners’ achievements and the curriculum problems in Jordan, with a focus on accounting and the forensic accounting field specifically. The discussions in chapters 4, 6, and 7 help to formulate the objectives of forensic accounting education in Jordan and the particular requirements that should be taken into account when developing a forensic accounting education programme. Moving from this foundation, chapter 8 analyses the interviewees’ perceptions regarding the learning outcomes and design of the forensic accounting framework. The design process for the forensic accounting framework developed in this research is illustrated below in Figure 5.1.

Figure 5.1: The design process of the forensic accounting framework developed in this research



Source: Author

5.6 The Research Methods

The objective of this research is to develop a framework for forensic accounting education which is compatible with Jordan's unique culture and business environment. The literature review and the document analysis method (Bowen, 2009), which was conducted at the research preparation stage, assisted in outlining the research problem and defining the research objectives and questions and also helped to provide a basis for the interviews. Forty interviews were conducted with academics and practitioners to capture a range of experiences and viewpoints on the development of a framework for teaching forensic accounting in Jordan.

While the literature review indicates cultural and contextual circumstances that need to be considered when developing forensic accounting education programmes and when implementing forensic accounting regulations (e.g., Pok, 1995;

Bierstaker, 2009; Okoye & Yohanna, 2011), little background data is available with respect to forensic accounting education in the specific context of developing countries, and, in particular, Jordan. The literature review and the subsequent interviews will, therefore, constitute both the foundation, and the potential, for developing forensic accounting education in Jordan. To assist with curriculum design in forensic accounting, this study will examine the views of practitioners (from both the public and the private sectors), academics, and employers relating to the form and content of a forensic accounting programme for Jordan's particular needs. This research employs two methods, interviews and the document analysis method, in its quest to answer its research questions, as explained in the following subsections.

5.6.1 The document analysis method.

Review of relevant university and government agencies documents was used in this study as a secondary data collection method to explore potential incentives and barriers to forensic accounting education and practice in Jordan. No limitation was applied to the period in which the publication was produced. Google's country-specific version was first used which allowed to search for Jordanian literature in the field of forensic accounting. The only criterion was that the term 'forensic accounting' [mohasabah jena'eyiah], forensic audit [tadqieq jena'ei], or 'judicial accounting' [mohasaba qada'iyah] (English or Arabic) had to appear within the publication. The document analysis method (Bowen, 2009) was used to review websites and reports of oversight agencies and government agencies and as a means to assess and understand the current state regarding forensic accounting practice in Jordan and to explore potential opportunities and challenges. The researcher also employed the document analysis method when reviewing relevant documents. Here higher education providers and regulators were targeted in order to assess and understand the current state of accounting and forensic accounting education and to explore potential incentives and barriers. Examples of documents reviewed and analysed include:

1. Accounting and forensic accounting syllabi for Jordanian and non-Jordanian universities.

2. The general framework of the instructions and accreditation standards for the special humanitarian and scientific disciplines to universities and colleges operating in the Hashemite Kingdom of Jordan for the year 2010 (the latest version of the framework).
3. Annual reports of the Jordanian Anticorruption Commission.
4. Laws and regulations for oversight agencies in Jordan.
5. The constitution of the Hashemite Kingdom of Jordan.

Thematic analysis was used to analyse these documents along with the interviews. The process of analysis is detailed below in section 5.6.2.4.

5.6.2 The interview method.

The primary data for this study was gathered through semistructured interviews. The three subsections which follow identify: the sampling techniques employed in this study and describe the participants; explain the designing of the interview guide; and, discuss the study procedures for recruiting, accessing, and interviewing participants.

5.6.2.1 Sampling and description of participants.

Qualitative and mixed research methods may rely on strategies of purposeful sampling or on the selection of participants who can best enrich understanding of the phenomenon under study (Marshall, 1996). Decisions regarding the selection of participants, therefore, require significant attention and should be consistent with the research purposes and questions, theoretical paradigms, and evidence informing the study (Coyne, 1997; Seidman, 2013).

The participants in this study were selected on the basis of two, complementary sampling techniques, namely purposive sampling (Ritchie, Lewis, McNaughton, Nicholls, & Ormston, 2014) and snowball sampling (Noy, 2008). In purposive sampling, participant selection is based on a predetermined set of criteria such as personal characteristics and attributes, scientific degrees or certificates, and particular knowledge or experience (Merriam & Merriam, 2009). Those who

participated in this study were selected on the basis of their knowledge of and experience related to forensic accounting practice and/ or education.

Snowball sampling is a technique where existing participants direct the researcher towards others who meet the study's criteria (Biernacki & Waldorf, 1981). In this study, snowball sampling was applied in two ways. In the first, participants nominated other people to be contacted, and, after obtaining their permission, passed on their contact details to the researcher. In the second case, participants recommended organisations to contact, without identifying a particular contact person within the organisation, on the basis of the participant's knowledge of the organisation identified. Atkinson and Flint (2001) claim that snowball sampling turns the data collection process into more of an investigation, where the interview of one person leads to another, and, thus, forms a more comprehensive picture for the topic under study.

The sample for this study was restricted to Jordanians working in organisations based in Jordan, or Jordanians working in other Middle Eastern countries who had relevant work experience in Jordan. This study involved interviews with 36 males and 4 females (see section 5.8 for a discussion on the representativeness of the sample). Thirty-one participants were based in Jordan, 3 were based in Saudi Arabia, 3 were based in Qatar, 2 were based in Kuwait, and 1 was based in the United Arab Emirates. The study sample included 16 practitioners from private audit firms and large firms and banks, 11 academics, 8 practitioners from oversight agencies, 3 Islamic theologians, and 2 decision makers for the Jordanian Association of Certified Public Accountants (JACPA) and the Higher Education Accreditation Commission (HEAC). Two practitioners and one Islamic theologian also had part-time jobs as academics. At the time of the interview, 16 of the participants had between 11 and 15 years' experience, 12 had between 6 and 12 years' experience, 10 had 16 or more years' experience, and 2 had between 1 and 5 years' experience

in the realm of forensic accounting¹⁶. The following table summarises the characteristics of the participants.

Table 5.4. Description of participants

Gender	Number of participants
Male	36
Female	4
Geographical location	
Jordan	31
Saudi Arabia	3
Qatar	3
Kuwait	2
United Arab Emirates	1
Organisation/occupation/ professional background	
Practitioners from private audit firms, large firms and banks	16
Academics	11
Practitioners from oversight agencies	8
Islamic theologians	3
The Jordanian Association of Certified Public Accountants (JACPA)	1
The Higher Education Accreditation Commission (HEAC)	1
Average years of experience	
11 to 15 years	16
6 to 12 years	12
16 or more years	10
1 to 5 years	2

Source: Author

5.6.2.2 Designing the interview guide.

In order to create effective research questions, the researcher needs, as Kvale and Brinkmann (2009) suggest, to gain familiarity with the literature and context theories relating to the topic. The author of this study is Muslim and has experience first as an accounting student and then as an accountant and auditor in Jordan, experiences which have further enhanced his familiarity with the topic.

¹⁶ To ensure the protection of the participants' confidentiality, the researcher presented the description of participants in a way that will not allow them to be identified individually. The researcher has eschewed presenting the description of individual participants, which would usually take a 'list of participants' table format, as doing so may allow them to be identified individually through matching their description and the quotations.

The interviews were semistructured, and employed a flexible interview guide to meet participants' needs (see Appendix 6) (Ritchie, Burns, & Palmer, 2005; Clifford, French, & Valentine, 2010). Each interview commenced with putting the participant at ease (Miles & Gilbert, 2005). The sequence of the interview questions, the way particular areas might be followed up, and the tone or terminology used in discussion varied between interviews depending on a participant's answers (Clifford et al., 2010). For example, if the participant began the interview by talking about the culture and business environment in Jordan, the interviewer would skip ahead to questions related to those areas, as appropriate. The remaining questions in the interview guide would then be asked as and when they fitted the discussion. Interviewees were provided with an opportunity at the end to add any additional information.

The interview guide was designed in line with the research questions (Kvale & Brinkmann, 2009) and is presented in Appendix 6. The interview guide comprised four themes/parts. Part 1 addressed research question 1: What incentives and barriers surround forensic accounting education in Jordan?; Part 2 addressed research question 2: What reforms are necessary to develop forensic accounting practice and education in Jordan?; Part 3 addressed research question 3: What should the framework for a forensic accounting education in Jordan be?; and, in Part 4 participants were asked to provide any further comments they wanted to make on the research topics or any feedback on the interview questions and process. The questions ranged across topics such as the demand for and supply of forensic accountants in Jordan, the potential advantages and disadvantages of and barriers to teaching forensic accounting, and which cultural and contextual requirements should be taken into account in relation to forensic accounting practice and education. Answers relating to the optimal structure, content, learning resources, materials, and assessment methods for a forensic accounting curriculum were also sought. While all participants received the same questions (see Appendix 6), the contribution to the discussion on each of the four themes/ parts outlined above varied among groups of participants. For example, although questions about barriers surround forensic accounting education in Jordan were put to all the participants, the main contributors to that discussion were academics. Practitioners and other participants made a marginal contribution to the discussion because they

felt they lacked familiarity with the academic and financial abilities of Jordanian universities.

Although intended for Arabic-speaking participants, the interview questions were developed in English, as English is widely spoken in Jordanian educational institutions and the business environment. Participants were provided with a choice of responding in either Arabic or English. The researcher employed a ‘double back-translation process’ developed by Brislin (1980) where questions were translated into Arabic by a translator and then translated back into English by another translator. The Arabic translation was then compared with the original English text to see if the two versions matched. Any changes that were needed were made to the original translation and the final draft was checked by an Arabic literature professor.

The majority of the participants chose to be interviewed in Arabic, although switching between Arabic and English frequently occurred in most of the interviews. Filep (2009) explains that the researcher and the participant may be more able to explain certain issues in one language rather than another. Therefore, code-switching “should not be regarded as a problem, but rather as a method that supports the communicative process” (Filep, 2009, p. 64).

5.6.2.3 Using social media to facilitate recruiting, accessing, and interviewing participants.

Chapter 1 Social media¹⁷ have grown rapidly in the Arab world over the last 10 years, becoming more of a fixed presence in people’s lives (Coulson, 2013). Likewise, a rise in social networks usage in Jordan followed a rise in overall Internet and smartphones penetration. According to the Pew Global Attitudes Survey (2014), 47 per cent of Jordanians have access to the Internet, 97 per cent own mobile phones,

¹⁷ There is no universally recognised definition of social media (Verkamp, 2013). Even the terminology remains unclear with some in the literature using the term ‘social network’ (e.g., Belew, 2014; Kent & Leaver, 2014) to refer to the same concept (Langmia, Tyree, O’Brien, & Sturgis, 2013). Google search trends (2015) for ‘social media’ versus ‘social network’ show that use of the former term has steadily increased since 2012. For the purpose of this study, the term ‘social media’ is used and defined as “websites and applications that enable users to create and share content or to participate in social networking” (Oxford Dictionaries, 2015b, n.p.). In turn, ‘social networking’ is defined as the use of social media “to communicate with other users, or to find people with similar interests to one’s own” (Oxford Dictionaries, 2015c, n.p.).

and 41 per cent of mobile phone owners have smartphones. This subsection explains how the researcher considered and utilised his understanding of the cultural values and characteristics and the progress toward social media in Jordan through this study.

This study involved semistructured telephone and social media/online interviews with 40 individuals. All the interviews were undertaken by the researcher himself over a one-year period in 2015/2016. A range of social media such as Facebook, Skype, WhatsApp, and Viber were used to recruit and contact participants. Twenty-five of the interviews were undertaken using the voice mode, and 15 using the video mode. Most of the interviews lasted between 45 minutes and 1 hour, with an average time of 55 minutes. Participants were always given the option to decide whether they would prefer a voice or video interview. Fifteen participants preferred video over voice interviews, although social platforms with a video call feature and reliable Internet connections that support video calls were available for at least 30 participants. Most interviews were conducted through free phone and video calls.

While social media have drawn the attention of researchers in different fields (e.g., Ayres, 2013; Lee, Wong, & Rothbard, 2014; Williams & Merten, 2011) only a few studies (e.g., Mangold & Faulds, 2009; Verkamp, 2013) explore the usage of social media in qualitative research. Research conducted by Mangold and Faulds (2009) and Verkamp (2013) has shown that social media can foster participants' involvement in research. Valkenburg, Peter, and Schouten's (2006) study evidences the positive effect social media usage can have on the quality of collected data. Rosenbaum and Wong (2012) explain that people are feeling increasingly more comfortable and familiar with communication technology, and this includes social media. Lunnay, Borlagdan, McNaughton, and Ward (2015) indicate that this comfort extends to research, which, in order to accommodate modern day communication preferences, requires attention to social media as a form of communication. Social media provide a variety of time and cost-efficient, as well as participant-friendly, communication and networking channels such as instant

messaging (IM)¹⁸ and digital media sharing which expand the research repertoire in terms of recruitment and building rapport. Despite the potential advantages of social media, traditional face-to-face interviews remain dominant, as many researchers still focus primarily on traditional communication rather than modern methods when engaging in qualitative research (Gillham, 2005; Rubin & Rubin, 1995).

Traditionalists view face-to-face interviews as a superior data collection instrument compared to telephone or online interviews (e.g., Gillham, 2005; Rubin & Rubin, 1995). However, several studies that assess the differential effects of face-to-face and online and telephone interview modes suggest either slight or no effects on data quality (e.g., Jäckle, Roberts, & Lynn, 2006; Shapka, Domene, Khan, & Yang, 2016). Novick (2008), though, explains that “there is a need for additional well-designed studies comparing interview modalities in qualitative research. Given the lack of evidence, it is unwarranted to favour any particular interview mode for qualitative interviews” (p. 5).

The review of the literature reveals that critiques of face-to-face interviews are centred around three main issues. The first issue is the costs and time associated with conducting in-person interviews. These can be high, and especially if there is a need to travel long distances to interview participants (Opdenakker, 2006). Travelling to meet interviewees becomes extremely costly and time-consuming when conducting research in an area with poor transport infrastructure or bad traffic. This is likely, in turn, to affect the researcher’s ability to recruit a representative sample of participants in a timely and cost-efficient manner (James & Busher, 2009).

The second issue relates to limited geographical access due to factors other than cost such as access to endemic areas, war zones, and politically sensitive or military sites (Gubrium & Holstein, 2002; Mosley, 2013). Multiple authorisations from governments, ethics committees, and/or private institutions are usually required for

¹⁸ Instant messaging (IM) is a text-based communicating service that enables individuals to communicate in real time over the Internet through a software application (Yoon, Jeong, & Rolland, 2014). IM falls somewhere in the middle between email or SMS and voice conversation. IM combines the advantages of email, in that it is nonintrusive, versatile, and cost-efficient, with those of SMS, which are that it is time-efficient and accessible and retains the interactive conversational nature of the voice conversation (Peslak, Ceccucci, & Sendall, 2010).

travel or access to such risk areas or sites. Such authorisation/s are usually hard to gain due to political, security, health or ethical considerations (Wood, 2006).

The third issue concerns the unsuitability of the face-to-face contact when researching sensitive topics. Sturges and Hanrahan (2004) argue that respondents being interviewed about sensitive topics such as sexual experience, drug abuse or incidents of dishonesty may feel uncomfortable about being interviewed in person and, thus, may not respond accurately. McCosker, Barnard, and Gerber (2001) explain that the potential risk associated with sensitive research may impact several participants such as the interviewer, interviewee, supervisor, and reader. This risk may be physical and/or psychological. Failing to consider, and protect, the physical and psychological safety of all participants involved in the research can impact negatively on their objectivity and, therefore, the data's validity. Hence, considering the limitations of face-to-face interviews and the global rise in social networks usage, researchers (e.g., Lunnay et al., 2015; Swirsky, Hoop, & Labott, 2014) increasingly, consider using social media websites to communicate, recruit participants, and collect data.

The communication nature of social media websites can be highly beneficial for researchers in terms of participant recruitment. For example, it is not usually necessary to know or contact users with public accounts before subscribing to their updates or reviewing their personal profiles (Quan-Haase & Young, 2010). Personal profiles in social media websites contain basic personal and professional information (Zimmer, 2010) such as name, gender, relationships, hometown, work, education, and religious and political views. This feature enables the researcher to review a large number of potential participants' profiles in a short time, making the participant recruitment process easier and more effective (Lunnay et al., 2015).

As identified by Kim, Park, and Oh (2008) and Suki, Ramayah, and Ly(2011), the majority of the interviewees in this study preferred instant interactive conversations and, thus, preferred instant messaging (IM), mainly via WhatsApp, Viber, and Facebook Messenger, as a communication channel. Instant messaging was useful in situations where it was difficult to predict how a participant would respond to a voice call. Instant messaging is less intrusive than a voice or a video conversation,

especially for the first contact, because it allows the receiver to identify the sender, read the message, and, then, decide how and when to respond.

Instant messaging proved to be an effective communication channel through which it was possible to provide potential participants with further information; it also provided the interviewees with the ability to respond to questions. As noted by Kemp, Wood, and Waldron (2014), when using instant messaging people tend to correspond in the form of a quick, informal, and brief chat. The use of instant messaging also provides potential interviewees with easy access to the interviewer regarding their concerns and questions. Instant messaging also allows researchers to respond and to provide explanations in a simple and friendly manner. Given that the participants in the research were mainly academics, auditors, and upper level executives and, therefore, often too busy to answer a phone call or even respond to an email, using instant messaging in this study to access them created ease and convenience.

Ritchie et al. (2014) identified the merits of achieving a successful first contact with potential participants. In addition to briefly introducing the researcher, first impressions had to be managed, while also establishing a trusting relationship with the participant before the purpose of the research and interview, terms of confidentiality, likely length of the interview, participant choice regarding the interview mode (either video or voice), the communication channel to be used for conducting the interview, and a suitable interview time could be clarified.

Achieving a successful first contact was challenging in this study for two reasons. The first was that Jordanians perceive email communication as a lower priority. This perception is indicated by the low response rate to the email invitation, and the responses that the researcher got when the initial contact was followed up with phone calls to those who had not replied to the first invitation. In the first month of data collection, 20 letters of invitation were sent via email; however, only four responses were received. Even when initial invitations were followed up with a reminder email, a phone call, or both, the response rate did not improve significantly. Responses in follow-up phone calls were: “I have not checked my email account this week”; “Your email may be marked as spam by mistake, I will double check”;

“I have received your email, but I have not got a chance to open it yet”; “I have received your email but I cannot find it now; send it again please”; and, “I do not check my email address regularly, how can I help please?”. In a number of cases the email invitation was sent more than three times with no effect.

The challenge presented by a nonresponse reaction to email invitations was significant and indicated that a different strategy would be required. To overcome the identified challenge, it was necessary to understand communication channel preferences of each potential participant. Facebook as a form of social media was utilised to search for the accounts of interviewees who had not responded to emails. The majority of potential interviewees had public accounts on Facebook, which made it possible to check their personal and professional details and updates without directly contacting them (Mathiyalakan, Heilman, & White, 2013). Four potential participants were sent ‘friend requests’ along with an initial invitation message and three of these ‘accepted’ the ‘friend requests’ and replied to the messages in less than 12 hours. The results obtained using other social media such as WhatsApp and Viber were equally successful.

The nature of the research topic (which was perceived by interviewees as complex) also presented a challenge. At first glance, some participants had reservations about their confidence and competence to participate in the study. This reticence is best exemplified by the following response from Hamza¹⁹, an audit manager:

“I do not have an academic knowledge in forensic accounting; I just have practical experience...you are doing your PhD in forensic accounting in a Western university and I am sure you know much about this field...I don’t know if I will be able to provide you with valuable information!”

After providing Hamza with further information about the research to address his concerns and clarify how sharing his professional experience could enrich the research, Hamza’s reluctance to participate turned into enthusiasm.

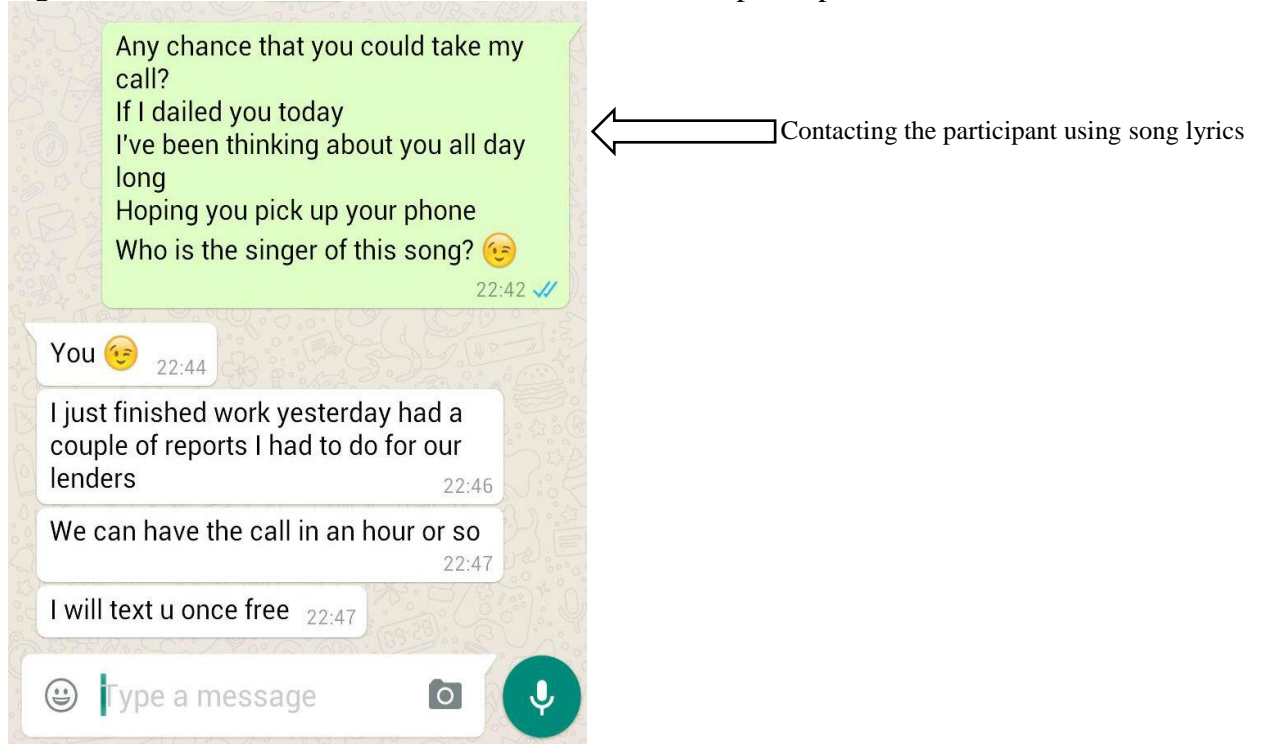
¹⁹ Pseudonyms have been used through the thesis.

The purpose of providing participants with rich detail was to ensure that each potential participant would obtain sufficient, clear, brief information on the research, while taking each individual's differences, preferences, and background into account. The significance of this strategy was underscored when two potential participants, provided identical information in terms of its form and content, responded with contradictory feedback. One participant indicated that information provided was "short" and required more information to get a "clear understanding" of the research topic. The other asked for "more brief" information that would allow him to get "a clear picture" of the research. Both were provided further information considering their individual requirements, a strategy which resulted in rich discussions in which the participants were able to give precise and detailed answers to questions asked in the interview.

Reviewing participants' personal profiles and updates in social media websites also allowed the researcher to capture and consider their backgrounds and preferences when approaching them. This approach was effective and helped to build trust, rapport, and friendly communication.

A conversation (see Figure 5.2) with Hasan, who is a finance manager, provides an example. The researcher noticed from Hasan's personal profile on Facebook that he was interested in music, so the researcher reminded him about their scheduled meeting using the lyrics of one of his favourite songs. This reminder was short and friendly, and Hasan's response was prompt and positive.

Figure 5.2: A conversation between the researcher and a participant



Source: Author

Regarding the research interviews, a few participants rescheduled at the last minute or showed up late or missed an agreed appointment. However, using social media provided flexibility in scheduling and rescheduling interviews. Neither the interviewer nor the interviewee had to leave their office or home in order to conduct the interview; nor did either need to be concerned about the waste of time and money that usually ensues when cancelling interviews. In addition, instant messaging allowed the interviewer to send quick reminders, receive instant confirmations or apologies, and reschedule interviews easily and immediately. An example can be seen in the following correspondence with Ammar.

I: I sent you a contact request on Skype, could you accept please? I will call you in 5 minutes if that still suits you?

Ammar: Just give me 15 minutes please to get home.

About an hour later, Ammar sent an instant message saying:
I am sorry, could we have our conversation tomorrow please? I have an urgent work. Tomorrow morning I will contact you to arrange.

Ammar mentioned only an approximate time for the interview, preferring to leave the exact time on the following day open and allowing him to make contact either a few hours or even a few minutes before the interview. As a busy chief auditor, Ammar was perhaps concerned he would again not be able to take the time to be interviewed as scheduled, so he wanted to ensure that he was free from any commitments before rescheduling the interview. Being able to communicate via IM was convenient for Ammar and allowed for more precision in rescheduling the interview.

5.6.2.4 Interviewing via IM applications.

Instant messaging and free audio and video calling have become common forms of communication, replacing traditional communication channels such as emails, SMS, and phone calls as preferred forms of communication (Church & de Oliveira, 2013; Gungl, Gratzner, Ruhle, & Fruend, 2014). The developers of instant messaging (IM) applications work on creating all-in-one applications where users can stay connected through a user-friendly, cost-efficient, and high quality service (Parsons & Woolley, 2013). A wide range of free IM applications can be downloaded and installed from application stores such as Play Store, App Store and Windows Phone Store (West & Mace, 2010). Downloading is an easy and quick process that usually takes less than 5 minutes.

Besides messaging, most IM applications are equipped with free voice- and video-calling features. Free voice- and video-call features allow users to make and receive calls over the Internet, rather than via a landline or traditional mobile network (Yoon, Jeong, & Rolland, 2014). As with in-person interviews, video interviews provide high information richness, as they allowed the interviewer and interviewee to observe nonverbal cues (Sullivan, 2013). Additionally, video interviews cost significantly less than in-person interviews to conduct.

As the world becomes more digital, people are gravitating toward instant, interactive conversations that take place on keyboards rather through voice and video calls (Kim et al. , 2008; Suki et al., 2011). Instant messaging allows the person talking to interact with the listener in an immediate back-and-forth discussion.

However, unlike in a traditional conversation, partners in instant messaging can disconnect and reconnect without a need to apologise or feel disconnected (Garrett & Danziger, 2007). IM applications also enable the user to conduct multiple, separate chats at the same time, as well as to create a group conversation between several people (Schwarz, 2011). Moreover, unlike emails and SMS, the users of instant messaging will usually be able to get check marks that indicate that the message has been successfully sent, received, and read. These checks help to make instant messaging more interactive. Users can also indicate whether they are 'available', 'busy', 'away', or ask that others 'do not disturb' via a status setting (Garrett & Danziger, 2007). The status setting functions as a kind of answering machine, which enables the user to respond when he/she feels it is convenient.

The 'typing' indicator is another feature that creates a high-involvement communication mode in Instant messaging (Buchenscheit et al., 2014). In oral communication, the listener senses whether others have finished making a point as their voices and intonation go down, and they usually leave a pause to let the other person talk. This information is missing in other text-based communication channels such as emails and SMS. However, an indicator in instant messaging compensates for this missing feature (Lancaster, Yen, Huang, & Hung, 2007), as a 'typing' indicator appears whenever the other party is typing an instant message, thus pacing the conversation.

The ability to share 'smileys' is another unique feature of instant messaging. Smileys, also known as emojis or emoticons, have attracted considerable attention as a visual digital language to express emotion and intentions (Jibril & Abdullah, 2013). Users believe that smileys can be richly expressive and compensate for the missing visual cues in online communication (Hsieh & Tseng, 2015; Skovholt, Gronning, & Kankaanranta, 2014).

Instant messaging also overcomes one of the challenges of keeping or taking notes on people contacted and on their responses, as it provides digital historical records of conversations (Schwarz, 2011). This record decreases the risk of data loss, as the history of conversations, contacts, and media can be backed up and resaved. Several applications and cloud storage services also benefitted this study by providing

easily researchable and accessible data. Furthermore, many IM applications such as Skype and WhatsApp support more than one communication mode simultaneously. For example, users can exchange and view texts and photos during a video or voice chat. This ‘multitasking’ feature is useful in cases where texts, documents, and website links had to be exchanged with participants for discussion purposes.

Finally, compared to other text-based communication channels, IM applications support the quick and efficient transmission of texts and other types of files such as photos and videos (Church & de Oliveira, 2013; Lancaster et al., 2007). IM applications by their very nature imply instant connection by encouraging people to skip the greetings, introductions, and niceties usually required with emails and voice and video calls (Kemp et al, 2014). Furthermore, with these applications the listener does not have to wait for a slow speaker to get around to his or her point or have to manage someone who talks for longer than necessary

Conducting most of the interviews online through free calls and video conferencing facilitated a successful recruitment of research participants and led to rich and thorough interviews. Many participants expressed gratitude for giving them the opportunity to be interviewed through modern communication channels. The possibility of being interviewed online or over the phone was attractive to many participants who would not have had the time or been able to participate in an in-person interview. For example, for Yasin, who works 2 hours away from home, being able to be interviewed via Skype meant that he did not need to meet the interviewer after a long working day and then arrive home late at night. Yasin clarified that it would be impossible for him either to meet during his working hours or lunch time: “I live in Al-Mafraq and work in Amman, if the interview was not via Skype I would not be able to participate”.

Voluntary participation in research distracts from already precious leisure and social life. Employees in Jordan spend long hours at work, working nearly 50 hours per week (Department of Statistics, 2015). As a result, they have less time available to spend on social and leisure activities (OECD Better Life Index, 2015). The participants in this study appreciated the fact that they could participate at a time of

the day or night that was most convenient for them and without having to worry about finding a suitable venue to meet.

Conducting online interviews allowed for in-depth and full discussions, because the participants were being interviewed in familiar and comfortable settings. A Skype interview that was conducted with Ibrahim, a finance manager and an academic, serves as an example. The researcher noticed Ibrahim was sitting on the floor, leaning against a couch, and holding a huge cup of coffee and clarified: “Good that you are conducting online interviews, as I am usually busy until late night with work and social visits. I just got my children down for sleep...so I am free now to discuss whatever you want”. The researcher had an in-depth, valuable discussion with Ibrahim that lasted well beyond the time frame originally planned.

Using social media also allowed participants whom the interviewer would never have been able to access via in-person interviews to be interviewed. Thanks to social media the researcher was able to conduct interviews with Jordanian participants located in more than five countries: Jordan, Qatar, Kuwait, the United Arab Emirates, and Saudi Arabia. Given that 500,000 Jordanians (one third of the Jordanian domestic labour force) work abroad (Comolet, 2014), having the ability to reach Jordanian expatriates was important. In order to generate rich data, it was necessary to also represent the number and level of Jordanians working abroad by including them in the interview process.

5.6.3 Data analysis and interpretation: Thematic analysis using Nvivo.

A thematic analysis of the interview data was performed in this study using NVivo 10, a computer-assisted qualitative data analysis software (CAQDAS) program. The decision to use computer-assisted qualitative data analysis software was made on the basis that the large volume of data collected from conducting 40 interviews would have been hard to analyse manually. Possible software options were explored by doing online research, consulting colleagues, and watching tutorials on YouTube. Nvivo, ATLAS, and MaxQDA emerged as the most popular and recommended options and NVivo was chosen as the most appropriate option for three key reasons. First, NVivo is relatively user-friendly, which allows the user to become proficient

in using it in a short time. Second, NVivo allows users to import, archive, access, and code almost all types of collected research data including notes, emails, spreadsheets, social media comments, photos, recordings, and videos and to link these to the transcribed data, which can also be imported directly from Word files. Third, NVivo is easy to install, is available free to the University of Waikato's students, and has a wide range of features that fulfil all the likely needs of this study.

NVivo is particularly efficient at organising the collected data into codes, identifying themes across the data sets, and exploring connections and relations among the themes. This work can be difficult and time-consuming if done manually, especially with large volumes of data. However, NVivo has one drawback which is that it “may not operate as expected when attempting to use right to left languages such as Arabic” (QSR International, 2017, para. 4). Some technical difficulties were experienced when dealing with Arabic texts. For example, when viewing Arabic text, some characters at the end of the text on the right were missing. Nevertheless, the researcher was able to deal with this technical problem by adjusting the font settings. Thus, it was possible to import, code, and analyse Arabic transcripts without the need to have them translated into English, with the exception of those quotations that were employed to support the study findings. The ‘double back-translation process’ (Brislin, 1980), which was employed to translate interview questions into Arabic as outlined in Section 5.6.2.2, was also employed to translate those quotations. English language was used in describing the codes and themes and in the analytical writing.

Thematic analysis involves identifying passages in texts that are related in such a way that allows the researcher to index the text into themes, and, therefore, to make sense of the collected data. Braun and Clarke (2006, p. 85) argue that “thematic analysis can be conducted within both realist/essentialist and constructionist paradigms” or a combination of both. Braun and Clarke (2006) offer a pragmatic approach to thematic analysis. This study followed the six-phase guide for conducting thematic analysis described by Braun and Clarke (2006). These phases are described in Table 5.5.

Table 5.5. Phases in thematic analysis

Phase	Description of the process
Familiarising yourself with your data	Transcribing data (if necessary), reading and rereading the data, noting down initial ideas
Generating initial codes	Coding interesting features of the data in a systematic fashion across the entire data set, collating data relevant to each code
Searching for themes	Collating codes into potential themes, gathering all data relevant to each potential theme
Reviewing themes	Checking if the themes work in relation to the coded extracts (Level 1) and the entire data set (Level 2), generating a thematic ‘map’ of the analysis
Defining and naming themes	Ongoing analysis to refine the specifics of each theme and the overall story the analysis tells, generating clear definitions and names for each theme
Producing the report	The final opportunity for analysis. Selection of vivid, compelling extract examples, final analysis of selected extracts, relating back of the analysis to the research question and literature, producing a scholarly report of the analysis

Source: Adapted from Braun and Clarke, 2006.

The first phase of conducting thematic analysis in this study began with transcribing the data. An intensive critical and analytical reading of the data transcription took place at this stage, in order to achieve a holistic picture of the data. Gradual understanding of the data was gained by listening to the recordings and reading and rereading the transcripts.

All the interviews were transcribed by the researcher himself. Each hour’s recording took around 4 to 6 hours to transcribe, depending on the quality of the recording and the clarity and speed of the interviewee’s speech. Despite being a time-consuming process, the transcribing process itself proved efficacious. Transcribing the interviews allowed the researcher to actively engage with the data and to gain a comprehensive understanding of it. In addition, as a result of having transcribed the data, the researcher was able to identify interesting ideas and meanings and to take note of possible patterns. Finally, the researcher endeavoured to start the transcribing process as soon after an interview as possible, as doing so allowed him to get early feedback on how the interviewing process was going and to make improvement where necessary.

Oliver, Serovich, and Mason (2005) identify two “dominant modes” for producing a transcript, namely “naturalism, in which every utterance is transcribed in as much detail as possible, and denaturalism, in which idiosyncratic elements of speech (e.g., stutters, pauses, nonverbals, involuntary vocalizations) are removed” (p. 1). In his

transcription, the researcher used elements of each mode in a way that he thought to be practical and suitable to the purpose of the research. While stutters and involuntary vocalisations were removed to retain the flow of the conversation, some nonverbals such as [hahaha] were kept when deemed necessary.

This first phase also involved importing university and government agencies reports and documents into NVivo. Analysing these documents was crucial to specifically understand the data set from the governmental and organisational perspective. In addition, importing these documents into NVivo allowed the researcher to engage with them and revisit them throughout the analysis process, in order to relate themes that were found in quotations from participants with these documents. Data from documents and quotations from participants were then provided to support the study's arguments. Data from distinct groups were also compared to analyse the data from a multi-group perspective.

The first phase of analysis provided the foundation for the second phase which involved generating initial codes from the data. Coding is the process of grouping the data into meaningful codes. The code, referred to as a node in NVivo, is a group of related data about a specific idea, conception, concept, place, person, culture or other area of interest. Using NVivo, coding can be done by simply dragging and dropping the identified object, which can be a passage of text, an image, a map or another form of data, at a node. Nodes in NVivo can be created, named, renamed, aggregated, and organised in hierarchies (e.g., parents and children). Coding allows the researcher to identify themes (patterns) across the data that can serve as the units of analysis (see Figure 5.3 below for a screenshot of nodes).

Figure 5.3: Nodes

Name	Sources	References
The term FA	7	17
Legal environment and regulatio	6	8
Jordanian businesses environme	2	2
Particular requirements	4	6
Learning outcomes	2	2
Undergraduate, postgraduate or	1	2
FA learning resources, materials	5	11
Current situatin of FA education	5	12
Skills, characteristics and knowle	8	20
Percentage of balance of conten	3	3
FA demand	8	19
FA supply	4	10
the context and who employs FA	1	1
How FAs trained	3	3
Accountants need for FA	0	0
Job opportunities for FAs	3	7
Advantages of teaching FA	4	7
Integrated or seperated	7	15
Ethical behaviour	7	8
Barriers and disadvantages	5	7
Assessment	2	4
Jordanian culture and FA	2	2
Cases of the use of FA in practic	1	1
Jordanian auditors and FA skills	2	2

Source: Author

Braun and Clarke (2006) explain that “coding will, to some extent, depend on whether the themes are more ‘data-driven’ or ‘theory-driven’...in the former, the themes will depend on the data, but in the latter, you might approach the data with specific questions in mind that you wish to code around” (p. 88). As the themes in this study were more data-driven than theory-driven, it was not surprising that the codes and themes centred around the research questions and the main interview questions. Nevertheless, the taking of a data-driven approach was evident where a few codes and themes emerged despite not being covered directly, or not being highlighted, in the interview guide. For example, criticism of the Jordanian Association of Certified Public Accountants was mentioned repeatedly by participants, although the interview guide contained no direct questions about the Jordanian Association of Certified Public Accountants. Thus, a code with the name ‘JACPA’ emerged. Furthermore, participants paid great attention to the ‘political corruption in Jordan’ in their discussions. As a result, this topic emerged as a code, despite being a marginal question in the interview guide.

The analysis in the third phase focused on classifying the different codes identified in the previous phase into overarching candidate themes. Themes differ from codes in the sense that they are often broader and, thus, can serve as units of analysis. At this early phase of analysis, many potential themes and subthemes emerged, making the picture of the relationships between them complex and even at times blurry. Hence, the uncertainties and questions that arose at this phase threw up issues such as: Should these codes form a theme or a subtheme?; Is there enough data to support this subtheme?; Where does this code belong?; and, Should this code be discarded? At this point, creating tables and drawing figures and mind-maps proved to be helpful in simplifying the complicated relationships between themes, subthemes, and codes and in answering the above questions.

The fourth phase involved reviewing and refining the description of, and the coded data extracts within, each candidate theme to ensure that each theme adequately captured the contours of the coded extracts. The outcome of this revision included creating new themes, merging themes, moving extracts from one theme to another so that they fitted better, omitting extracts that did not add value, and coding additional data, because, as Braun and Clarke point out, “The need for recoding from the data set is to be expected as coding is an ongoing organic process” (2006, p. 21).

The fifth phase involved the further defining and refining of themes. This task was done at both the individual theme level, by identifying the essence and scope of each theme, as well as at the broader ‘thematic map’ level, by organising themes into a coherent and internally consistent narrative. Subthemes were also generated as part of this refinement; these were useful for developing the structure and demonstrating the hierarchy of the thematic map.

Writing up the findings was the sixth and final phase of the thematic analysis. Data extracts were chosen and provided, where necessary, to support the discussion, convey the meaning, portray, and sometimes simplify the issue. In addition, the detailed description and plentiful excerpts from the data provided in the findings chapters allow and encourage the reader to view and interpret the data in a way that is free from the researcher’s influence and, thus, enable the reader to assess the

researcher's interpretations (Morse, Barrett, Mayan, Olson, & Spiers, 2002). Further discussion on the differences in interpretation is provided in the following section.

5.7 Quality of the Research

Much literature has focused on the significance, however difficult, of developing quality criteria in qualitative and pragmatic research (e.g., Golafshani, 2003; Rolfe, 2006). This research adopts a pragmatic position and intermixes qualitative and quantitative paradigm characteristics (Onwuegbuzie & Johnson, 2006). Establishing quality criteria in such research is problematic because of the need to integrate rigor and objectivity as well as creativity into the research process (Whittemore, Chase, & Mandle, 2001).

Much academic debate centres on how research quality can be assessed. For instance, Bryman (2006, p. 122) states that assessments of research quality “relate to the overall research process from formulation of research questions to the generation of implications for theory”. Researchers such as Creswell (2002) and Onwuegbuzie and Johnson (2006) have argued that the criteria for evaluating quality in pragmatic research should differ from those applied to qualitative or quantitative research. However, Bryman (2006, p. 122) explains that when data collected in a research project is predominantly qualitative or “when the amount of quantitative data is minimal”, criteria associated with qualitative research would be most appropriate to evaluate research quality. As that is the case in this research, Ballinger's (2006) four criteria, or considerations, associated with qualitative research were chosen as a means to evaluate the quality of this study. These four considerations involve ensuring coherence across the research process, providing evidence of systematic and careful research conduct, producing and presenting convincing interpretation, and explaining the role of the researcher in the study. The four considerations of quality followed in this study are laid out in Table 5.6 and explained further in the discussion that follows it.

Table 5.6. Four considerations of quality in qualitative research

Consideration	Application in this study
Coherence across the research process	The aims of the study relate to the study design.
Evidence of systematic and careful research conduct	The researcher has explained how the interviews were conducted and analysed, who the participants were, and how they were selected.
Convincing interpretation	The researcher has interpreted and presented the findings in a way that seems convincing and is based on the data.
The role of the researcher in the study is explained.	The researcher has clearly explained his role in the research study.

Source: Adapted from Baillie, 2015

This study aims to gain a deeper understanding of the effects of culture on human behaviour and, specifically, to gain new insights into forensic accounting education. Furthermore, as forensic accounting is still in the developmental stage in terms of becoming more formalised and regulated (McMullen & Sanchez, 2010), it is necessary to pay attention to both the horizontal and vertical dimensions of the study. For this reason, relying on the pragmatic approach allowed the research goals to be explored in depth, while also allowing other themes to emerge from the analysis (Johnson et al., 2007; Morgan, 2007).

This study provides a detailed explanation of the process of designing the interview guide (see section 5.6.2.2) and undertaking the interviews (see section 5.6.3.3), the data analysis process (see section 5.6.3), and the sampling and description of participants (see section 5.6.2.1). Such explanation is essential, as it allows the reader to evaluate whether the research design and procedures were reasonable (Baillie, 2015) when considering the quality of the research.

Excerpts from transcripts of the interviews have been presented in this study in the form of ‘direct quotations’ alongside the commentary and interpretation. The inclusion of direct quotations enhances the quality of the research in four ways. First, direct quotations strengthen the authenticity of the research by serving as supporting evidence for the researcher’s interpretation. Second, direct quotations allow the readers to assess the accuracy of the researcher’s interpretation and to develop their own interpretations. Third, the inclusion of direct quotations enhances readability and clarifies the links between data and interpretation by providing illustration, explanation, some kind of sensibility and, at times, adding humour to the text. Fourth, enabling participants to speak for themselves and to present their

views and perspectives using their own words demonstrates the value of their experiences and conveys richer and deeper meaning to the reader.

Achieving a stance of neutrality in research, in general, is not easy. Denzin (1989) argues that regardless of the methods used, researchers cannot completely avoid bringing their own interpretation to the problem under study. In the following extract, Denzin (1989, p. 23) explains that researchers must make their position and the way it might influence their research clear to the reader:

All researchers take sides, or are partisans for one point of view or another. Value-free interpretive research is impossible. This is the case because every researcher brings preconceptions and interpretations to the problem being studied. The term “hermeneutical circle or situation” refers to this basic fact of research. All scholars are caught in the circle of interpretation. They can never be free of the hermeneutical situation. This means that scholars must state beforehand their prior interpretations of the phenomenon being investigated. Unless these meanings and values are clarified, their effects on subsequent interpretations remain clouded and often misunderstood.

The researcher is a Muslim Arab Jordanian of Palestinian origin who has encountered several issues whilst living in a conflict region. This background, together with his experience in Jordan as both a university student and an accountant, may have resulted in personal bias during the research process. As it is difficult to fully occupy an outsider position, the researcher has attempted to follow the advice given by Dwyer and Buckle (2009) in the following quotation and to position himself in an appropriate space between that of the insider and the outsider in a way that affords him a deeper appreciation of the experience under study, while avoiding a heightened level of researcher subjectivity.

As qualitative researchers we are not separate from the study, with limited contact with our participants. Instead, we are firmly in all aspects of the research process and essential to it. The stories of participants are immediate and real to us; individual voices are not lost in a pool of numbers. We carry these individuals with us as we work with the transcripts. The words, representing experiences, are clear and lasting. We cannot retreat to a distant “researcher” role. Just as our personhood affects the analysis, so, too, the analysis affects our personhood. Within this circle of impact is the space between. The intimacy of qualitative research no longer allows us to remain true outsiders to the experience under study and, because of our role as

researchers, it does not qualify us as complete insiders. We now occupy the space between, with the costs and benefits this status affords. (p. 61)

To this end, potential study limitations and the way they might influence this research are explained in the research limitations section (see section 9.5).

5.8 Ethical Considerations

This research study was granted ethical approval from the Ethics Committee at the Waikato Management School (see Appendix 7). Participation in this study was completely voluntary, and if a participant did not wish to answer any of the questions, then he/she was not obliged to do so. The participants were also given the option to withdraw from the study at any stage.

All the details of this study, including the study's goals and expected results, were explained to the participants through the Introductory Letter to Participants (Appendix 8) and the Participant Information Sheet (Appendix 9) before they signed a Consent Form (Appendix 10), if they wished to participate in this study. With regard to the participants' privacy, the identities of all of the participants have been kept, and will remain, anonymous throughout the study and in all publications that flow from it. The participants were assigned pseudonyms in place of their real names and these will be used in all publications. Data collected from the participants is held securely in a digital format and protected by a robust computer security system which includes access permission restrictions, antivirus scanner, and firewall software.

5.9 Summary

This chapter consisted of two parts. The first part demonstrated the philosophical stance of the research and the research paradigm. Considering the exploratory nature of this study, pragmatism was adopted as a paradigm for the reason that it allows space for different stances to emerge and a more holistic picture of the topic under study to be drawn. The pragmatic approach relies on abductive reasoning, which is consistent with NVivo, the data analysis software used in this study, because that approach often requires the researcher to move back and forth between

deductive and inductive reasoning through the coding process. Furthermore, the pragmatic approach emphasises the role that cultural and contextual factors play in shaping perceptions and attitudes and in explaining human behaviour. The aim of this study is to develop a framework for forensic accounting education compatible with Jordan's unique culture, political and economic context, and business environment. Thus, it is argued that the pragmatic approach is consistent with the aim of this study.

The second part outlined the techniques and procedures that were employed in this research to gather and analyse data. The primary source of data collection in this research was a semistructured interview. This research employed two, complementary sampling techniques, namely purposive sampling and snowball sampling. A range of social media, mainly Facebook and WhatsApp, were used to recruit and contact participants. The use of social media led to a successful recruitment of research participants and facilitated rich and thorough interviews. The interview guide was developed to pose questions around four themes which were based on the interview objectives that, in turn, were derived from the research questions. The research themes also formed the basis for developing the codes that were used in data analysis. The background data which was gathered as a secondary source to increase the reliability of the research was explored using the document analysis method (Bowen, 2009). The quality of the study was ensured as far as possible by following four considerations associated with qualitative research. These four considerations involve establishing coherence across the research process, providing evidence of methodical and careful research conduct, producing and presenting convincing and relevant interpretation, and, illustrating the role of the researcher in the study.

The following three chapters deal with the study's findings.

Chapter 6

Findings on Research Question 1: Incentives and Barriers Surrounding Forensic Accounting Education in Jordan

6.1 Introduction

The findings of this study are presented in three chapters, each of which addresses one research question. These chapters present the voice of 40 Jordanian participants representing accounting academics and practitioners from the private and public sector in Jordan, lawyers and legal experts, and Islamic theologians, as well as university websites and syllabi and other relevant documents and websites and reports of anticorruption and government agencies. The participants offered their own perceptions and reflections concerning the incentives, barriers, and particular requirements for forensic accounting in Jordan. They addressed appropriate learning outcomes and design for a framework for forensic accounting education that best suits the Jordanian context.

This is the first findings chapter. It specifically addresses the first research question which is: What incentives and barriers surround forensic accounting education in Jordan? The first section of this chapter presents a review of the ways in which participants perceive and use forensic accounting-type terminology. This review is essential to obtain a baseline measurement of stakeholders' understanding of, and familiarity with, the term forensic accounting. Understanding the various stakeholders and their needs, perceptions, and values is an essential starting point in the development of an effective curriculum (Heinfeldt & Wolf, 1998; Taba, 1962; Wood, 2010). The second section investigates the participants' opinions and expectations regarding the importance and advantages of teaching forensic accounting in Jordan and analyses forensic accounting supply and demand forces in the Jordanian business environment. The third section explores relevant education-related and socioeconomic barriers to forensic accounting education.

6.2 The Terminology

The study finds that the term ‘forensic accounting’ is still not well-established in Jordan. This finding is in line with Alkubaisi (2016). When asked if they had ever heard of the term forensic accounting or the term forensic audit [*mohasabah jena’eyiah* or *tadqiq jena’ei*], most of the participants responded in the affirmative. Interestingly, however, all the participants described forensic accounting as a “new” and/or “uncommon” term, as the following comments illustrate:

Forensic accounting is not a very common term. I think it has only come into existence recently with international developments worldwide that focus on corporate scandals, maybe, and fraud cases that have taken place internationally. You don’t really see it much in curriculums, particularly in Jordan...I am happy that there is somebody like yourself undertaking this task to clarify this. Because I do think even for accountants and people there in academia, I think there is that confusion. So I am happy that you are doing this, definitely. (Adam)

No, it’s not common. I mean, if you ask if they know about it, especially mainly researchers, master students, PhD students. However, actually is it a common term within academia? Not common. (Nassar)

Forensic accounting! Frankly, Ahmed, it is [an] uncommon term! If you come to Jordan or Qatar, where I am working now, and ask people what is forensic accounting, they won’t know. (Nabil)

I have never heard the term forensic audit or forensic accounting, except while studying for the American Certified Internal Auditor certificate. (Jawad)

Although their work centres around antifraud and anticorruption issues, the participants from oversight agencies also appeared to be unfamiliar with the term forensic accounting. For example, Imran, a manager in a government agency, stated, “Although my specialisation is in forensic law, frankly, it is the first time I’ve heard of this concept”. However, by drawing on their practical experience, many were able to describe what they understand as forensic accounting. The following comment by Yasin, an auditor at the Audit Bureau, provides an example:

This term [forensic accounting], frankly, 3 years ago I and a colleague where doing some investigation work, and in those days my colleague

was studying for the Certified Government Financial Manager certificate...and this topic [forensic accounting] was part of this certificate. But otherwise, I don't know the term. However, as for forensic accounting services, this is at the heart of our work. To go and collect evidence; to prepare a report, a report that anyone, not just an accountant, can read, understand and get outcomes from; that he can use to plead in front of a judge; to be called as an expert, not as a witness or something else; to participate in an investigation committee, our work at the Audit Bureau involves all of that. (Yasin)

Academic participants, generally, showed greater surface-level familiarity with the term forensic accounting compared to practitioners. This finding contrasts with Heitger and Heitger (2008) who found that academia had little awareness of the term. One explanation for this contradiction might be that a large proportion of accounting faculty members in Jordan graduated from Western (mainly American) universities where the term forensic accounting is more prevalent (Susser, 2013) than it is in Jordan. In addition, as forensic accounting books, journals, and research are predominantly in the English language (Huber, 2015), those academics who obtain Western qualifications often have a greater competency in English language that allows them a greater access to up-to-date knowledge and forensic accounting literature (Sabbour et al., 2010) compared to practitioners.

Additionally, this study finds that participants' perceptions and definitions of the term 'forensic accounting' vary, are inconsistent, and even at times contradictory. This finding is in line with existing research (e.g., Albrecht et al., 2016; Huber, 2012; Stanbury & Menzies, 2010) which found that forensic-type terms (or antifraud-related terms) such as fraud auditing, fraud examination, fraud investigation, investigative accounting, forensic audit, and forensic accounting are not clearly defined in the literature (see section 4.3). Interviewees variously defined forensic accounting as: a financial investigation, followed by legal advice; the activities of discovering and analysing financial issues and presenting the results in court; the process of holding criminals accountable; an audit for the purpose of detecting fraud; and, as a kind of agreed-upon procedure. The excerpts below demonstrate the participants' various and varied understandings of forensic accounting:

Forensic accountants, as I understand them to be, hmmm, provide perhaps legal advice pertaining to accounting issues. So what they do is they provide support to the authorities; perhaps, they are investigating a specific situation. So I think they go beyond financial standards and I think they go beyond accounting regulations and they really dig beneath to find issues that have broken the law; they can be used in a court of law. So it is not just reporting and providing assurance. You know financial accounting that examines auditing; it really goes beyond [ordinary accounting practices] to detect and, maybe, provide support for an existing legal case. Maybe some criminal aspects are involved. (Adam)

Now forensic accounting, from my experience as a lawyer in a control body, you can say it means how to hold someone accountable for his crime. This is the idea that I have. (Sarah)

Equivalent to the forensic accountant is the forensic investigator in policing. His duty is to discover problems, analyse them, reach the absolute truth, if you will, and to put it in front of the court. (Fadi)

Now, if there is a kind of change needed for the legal environment, related to forensic accounting, I think the most needed thing is more definitions related with forensic accounting and more need to define the role of those people when they deal with the courts and the judges and you know the lawyers...Still there is a problem, there is no clear definition for forensic accounting, still like it is a kind of practice more than being clearly defined as a professional career. (Hamza)

Contributing to the confusion surrounding the term ‘forensic accounting’ is the inconsistent use of terminology by oversight agencies, accounting firms, and within academia. The inconsistency leads to ambiguity around the nature and boundaries of tasks and responsibilities that professionals within the forensic field are involved in. The interviewees suggested a range of alternative terms for ‘forensic accounting’ that include, ‘judicial accounting’ [*mohasaba qada’iyah*], ‘forensic audit’ [*tadqeeq jena’ei*], fraud audit [*tadqeequl ihtyal*], and ‘fraud examination’ [*fahsul ihtyal*]. Differential concepts labelled under the term ‘forensic accounting’ can potentially lead to confusion among users of these services. Most participants seemed to see no difference between forensic accounting and other forensic-related tasks. Eisa, for instance, believed that the same concept is covered by a range of fraud-related terms and that these can be used interchangeably with the term forensic accounting. Throughout the interview, Eisa, as did others, preferred to use the term ‘judicial

accounting' [*mohasaba qada'iyah*] over forensic accounting, as indicated in the following comment:

My experience now, I work in forensic accounting, or let's say judicial accounting, if you will, as they both lead to the same meaning. Now you find forensic accounting, judicial accounting, certified public accounting. Give me, if you can, a definition that differentiates between the duties of internal auditing, external auditing, investigative accounting, forensic accounting or judicial accounting. You will find that you maybe just remove a full stop and put a comma, but in the end it is the same term. (Eisa)

Furthermore, the consequences of using the term 'forensic accounting' concerned participants. Participants gave two reasons to justify their concern. First, they indicated that the lack of familiarity with 'forensic accounting', both as a term and a field of practice, may pose challenges for communication. This concern was also highlighted by Fletcher, Higgins, Mooney, and Buckhoff (2008) who conducted a feasibility study to assess the level of interest in forensic accounting among stakeholders and noted that the use of the term 'forensic accounting' did act as a barrier to communication as follows:

This [obtaining feedback from participants] proved more difficult than initially expected because we made the mistake of using terms (e.g., forensic accounting, forensic accountant, computer forensics, etc.) that were unfamiliar to the average business person. We had to learn how to clarify and sharpen our message by first talking about the widely documented expectations gap that exists in financial auditing and then leading up to the need to train accountants to detect and prevent fraud. (p. 19)

Participants made clear that communication and the choice of terminology for forensic accounting must be geared toward a recipient's ability to understand. Tariq, for example, indicated that the term 'forensic accounting' is unfamiliar and added, "It is more practical anyway to use the term forensic audit". Tariq explained that accounting involves handling daily financial transactions, while auditing involves obtaining and evaluating evidence regarding financial transactions and communicating results to interested users. Thus, for Tariq, forensic-related services have, by their very nature, more to do with auditing than with accounting. The preference to use the term 'forensic audit' instead of 'forensic accounting' has been

noticed in the extant literature. For example, a survey conducted by Luke (2013) discussed the indispensable role of ‘forensic accounting applications’ to ensure confidence in audit reports. Luke reviewed forensic accounting definitions in the literature as an introduction to his study. However, he used the terms ‘forensic audit’ and ‘forensic auditors’ in all the research questions, which suggests that Luke (2013) used the terms ‘forensic accounting’ and ‘forensic audit’ as synonyms. Luke’s preference to use the term ‘forensic audit’ in the survey instead of ‘forensic accounting’ questions stakeholders’ perception of the term. Luke’s preference raises the question whether the term ‘forensic audit’, from a certain point of view, may convey the content of the concept under study to the survey participants in a more clear or powerful manner.

Second, several participants explained that the Arabic translation for the word forensic [*jena’eyiah*] has a negative connotation that suggests offence, sin, or penalty, which is very likely to cause hesitation, and even resistance, among stakeholders to adopting forensic accounting techniques and education (Jiang, Muhanna, & Klein, 2000). Ibrahim, the owner of an auditing services and training business, for example, believes that the use of the word ‘forensic’ [*jena’eyiah*] made businesses in Jordan avoid being involved or showing interest in forensic accounting, because they feared such involvement could be considered as a sign of their having fraud and corruption issues. Consequently, the reputation and credibility of the business in the eyes of customers, competitors, suppliers, and other stakeholders could be damaged. Ibrahim experienced this reluctance to engage with forensic accounting first-hand when he offered a training programme on it to a range of firms in Jordan:

You will be surprised that when [I] proposed this programme [forensic accounting course programme] to a group of big public limited companies, some banks and other [companies] not only failed to respond, but also would not even allow people to talk about this issue [forensic accounting] there. They were afraid to participate in these things because they thought that this way it would be like we are admitting having ‘forensic’ issues. (Ibrahim)

Ibrahim goes on to argue that this negative connotation of the word *jena’eyiah* drives Jordanians to use other terms to refer to the concept of forensic accounting.

The most common descriptor, as mentioned earlier, is ‘judicial accounting’, although it could be less applicable.

They used to call it judicial accounting, because the word ‘forensic’ suggests ‘crime.’ The word ‘judicial’ doesn’t; it suggests being for ‘judicial purposes.’ (Ibrahim)

Nevertheless, as stakeholders’ perceptions and preferences change overtime and differ from one context to the other, it might be impractical to endorse the use of ‘judicial accounting’ [*mohasaba qada’iyah*] or any other specific alternative terminology for forensic accounting. The finding, however, indicated that the consideration of the practical consequences of the use of a specific term (e.g., ‘judicial accounting’ [*mohasaba qada’iyah*] or ‘forensic audit’ [*tadqeeq jena’ei*]) to describe ‘forensic accounting’ is not less important than the consideration of the applicability of the use of this term. A pragmatic approach to the choice of terminology for forensic accounting might, thus, be needful in the Jordanian context. This pragmatism involves deciding the appropriate terminology based on its understandability, desirability, and in the light of its effect on stakeholders (Haack, 2009). This is to say that although the term ‘forensic accounting’ might be a more accurate description of the concept of ‘forensic accounting’ compared to ‘judicial accounting’, a professional training provider, for example, might choose to use the term ‘judicial accounting’, being deemed a more acceptable term in Jordan, to describe a training course.

To conclude, this study finds that participants’ perceptions and definitions of the term ‘forensic accounting’ vary. Participants variously defined forensic accounting as: a financial investigation; the activities of discovering and analysing financial issues and presenting the results in court; an audit for the purpose of detecting fraud; and, as a kind of agreed-upon procedure. Contributing to the confusion surrounding the term ‘forensic accounting’ is the inconsistent use of terminology by practitioners and within academia. Those interviewed used a range of terms referring to the concept of forensic accounting, for instance, judicial accounting [*mohasaba qada’iyah*], forensic audit [*tadqeeq jena’ei*], and fraud investigation [*fahsul ihtyal*]. Furthermore, several interviewees revealed their concern with the use of the term ‘forensic accounting’ [*mohasabah jena’eyiah*] because they

perceived it as a term that carries a negative connotation. The careful use of acceptable terminology is, thus, important in promoting forensic accounting in Jordan.

6.3 Incentives and Opportunities for Forensic Accounting Education

With the exception of one accounting academic who viewed forensic accounting as being not very different from what is already being taught in the auditing and taxation papers, all the participants perceived teaching forensic accounting as important and advantageous. Those participants represent the views of various stakeholders in forensic accounting education in Jordan, including academics as well as practitioners and decision makers from oversight agencies, the Big Four and other Jordanian audit firms, the Jordan Association of Certified Public Accountants, and users of forensic accounting services.

Participants perceived three main advantages to teaching forensic accounting in Jordan: first, enhancing graduates' competencies to meet market needs; second, re-establishing the accounting education connection with the political and social world; and, third, improving graduates' ethical decision making. Participants, however, placed more emphasis on the importance of enhancing graduates' competencies to meet market needs as the most important benefit of forensic accounting education.

6.3.1 Enhancing graduates' competencies to meet market needs.

The study finds that employers of accounting graduates in Jordan expect and require a good understanding of basic forensic accounting skills and the ability to deal with fraud issues. Participants believed that basic forensic accounting knowledge and skills are needed by all entry-level accountants regardless of their chosen career path. Ammar, a member of the Jordanian Association of Certified Public Accountants board of directors, explained that fraud, embezzlement, and other financial crimes are serious problems affecting businesses in Jordan, without regard to size or industry. Ammar suggested that employers in Jordan are expecting accountants and auditors to have appropriate forensic accounting knowledge and skills to recognise these financial crimes.

I think integrating forensic accounting into the accounting curricula will allow graduates to acquire more skills, skills that are required by the market. Why am I saying required by the market? Because if you are an employer or a business owner and you got one [an accountant] with forensic accounting experience or education, you will feel more confident that this guy will uncover any inventory fraud, sales fraud, purchases fraud, and that he's got the ability to identify any weaknesses that may result in any forensic issue. What I mean by forensic issue is, generally, embezzlement, fraud, theft, any terms that would be called crimes. (Ammar)

Similarly, Sarah, a top manager in a government agency, explained that accountants in general, and auditors in the oversight agencies in particular, need to possess strong forensic skills in order to be able to deal with the growing complexities of the business environment. Hamza, among other participants, however, argued that accountants in Jordan are not receiving the kind and level of education that is required to help them in their tasks. Hence, participants highlighted the need for fraud-specific training, arguing that current accounting and auditing courses do not provide sufficient coverage. This addition, according to Omar, would help to match graduates' competencies with employers' expectations, which would have a positive impact on graduates' ability to find jobs.

In my opinion, adding forensic accounting courses to the accounting curriculum can seriously benefit at least three major stakeholders in accounting education, namely, students, practitioners, and employers of accounting graduates. Enhancing graduates' skills and knowledge in regard to fraud and forensic accounting will help them to find jobs and also, at the same time, help employers to find good employees. (Omar)

These arguments are in line with the repeated calls for reform of accounting education in the wake of the collapse of Enron, WorldCom, and subsequent corporate failures in the early 2000s (Horniachek, 2008; McPeak, Pincus, & Sundem, 2012; Sikka et al., 2007), which led to changes in accounting education in many countries. These changes included giving greater attention to forensic accounting subject matter content such as fraud examination, digital forensics, and ethics (Amernic & Craig, 2004), with the aim of improving graduates' skills and competencies in order to meet changing market needs and employers' expectations. Many universities have recognised the need for more specialised training in these

forensic-related areas (Seda & Kramer, 2014; Smith & Crumbley, 2009) and considered integrating forensic accounting into their accounting curriculum and/or offering forensic accounting courses and programmes (Kramer, et al., 2017). This has not been the case in Jordan. Universities in Jordan have been slow in providing forensic accounting education, even though the changing accounting environment is demanding that graduates acquire forensic accounting knowledge and skills (Alkubaisi, 2016). As discussed in chapter 2, only two universities in Jordan are offering elective courses related to forensic accounting (see section 2.6). This fact was confirmed by Omar, a chairperson of a department of accounting, who also added that these elective courses are rarely offered, as they depend on student enrolments and the availability of faculty.

To my knowledge, currently there is no university providing a full programme in forensic accounting. In Jordan, there are only a limited number of accounting programmes offering forensic accounting courses. Two Jordanian universities out of 26 are teaching accounting [as a] discipline and offering forensic accounting- related courses. Both these universities operate in the private sector — Applied Science Private University and American University of Madaba — and offer two elective courses related to forensic accounting. It is, thus, evident that there is a large void between the supply and demand for forensic accounting services [...] The Jordanian education system at universities ought to act in this connection. (Omar)

Moreover, a review of accounting and auditing syllabi at Jordanian universities shows that forensic accounting is a neglected area within accounting education. There is hardly any mention of the term ‘forensic accounting’ anywhere in the syllabi, and the only exposure students receive about fraud-related issues is within the auditing course. All Jordanian universities offer accounting students a two-course audit series. Coverage of fraud-related topics in the typical audit course is minimal and limited to technical discussions in relation to the auditor’s responsibility, which include mention of ISA 240 (auditor’s responsibility relating to fraud), and the AICPA code of ethics. In addition, few courses include mention of the role of internal audit and corporate governance in fraud risk management. Table 6.1 shows the coverage of forensic-related topics in the auditing courses of the four largest public and private Jordanian universities by enrolment. These four

universities house more than a third of university students in Jordan (see Appendix 2 for the number of students in Jordanian universities).

Table 6.1. Forensic-related topics in auditing courses of a sample of public and private Jordanian universities

Public universities	Forensic-related topics in auditing courses
University of Jordan	The nature of auditing and auditors' responsibilities The effects of internal audit structure on perceived financial statement fraud prevention
Yarmouk University	Objectives and responsibilities of auditors. Study and evaluation of internal control system
Private universities	
Al-Zaytoonah University of Jordan	Objectives and responsibilities of auditors Fraud auditing and corporate governance
Applied Science Private University	Objectives and responsibilities of auditors

Source: Adapted from Applied Science Private University (2018), Al-Zaytoonah University (2018), The University of Jordan (2018), and Yarmouk University (2018)

6.3.1.1 Career and employment opportunities.

Participants perceived a gap between the supply and demand for accountants with forensic accounting knowledge and skills in Jordan. The participants mentioned several circumstances under which accountants in Jordan have a critical need for forensic accounting. Employment opportunities are numerous and include audit firms, insurance companies, law enforcement, and oversight agencies. Yasin, for example, explained that forensic accounting is most demanded by insurance companies, followed by courts, and oversight agencies, and Hashim pointed to the liquidators' need for forensic accounting skills and knowledge, as the following comments show:

Frankly, the most demand will be the first degree, the issues of insurance companies. Insurance companies regarding losses, losses evaluation, fraud evaluation and manipulation. Courts come second; I am giving you their order, regarding evaluation committees, property committees, limitation of succession, and these issues that people have conflicts about. Oversight agencies come third. (Yasin)

That time I was a member in a liquidation committee in an insurance company. Always, always they go and assign a lawyer as a liquidator, and you would be in a valley and he would be in another valley. So not only for the operations of evaluation and assessment and fraud operations, companies' liquidation as well. (Hashim)

Moreover, the growth of the not-for-profit sector offers many opportunities for forensic accountants, especially in oversight agencies. Several participants pointed to the widespread disillusionment among the population of Jordan, arguing that the public would be interested in forensic accounting as a profession that could help to protect them from fraud and public sector corruption. The majority of the participants also anticipate a growing demand for forensic accounting in Jordan as a result of the increasing fraud and corruption, as the following excerpts illustrate:

I do think and I do foresee demand for forensic accounting. Mainly because there are expectations that there will be an increase in white collar crime, an increase in fraud, an increase in people or companies using creative accounting, borderline criminal intent. Yes, I definitely see demand for that in Jordan. (Adam)

We are greatly in need of them [forensic accountants] now in Jordan, either in the public or private sector, because you know about the corruption currently in Jordan. (Hashim)

I think, I think generally, the public would love something like that. Because if you look at the public in Jordan, everybody is upset, everybody believes, somehow, they have a point of view, anybody, even if you talk to a high school student or a university student, they will say "*makleen el balad*"²⁰. They say they are using the country's resources, which in Jordan means minimum resources. There is a scarcity of resources, and if you look at, like, ministers and, you know, the government workers, they have amazing huge houses. So it is, like, 'Where is the money coming from? [Hahaha], so I am sure the public will be very much interested. But will the government be interested in it? (Isam)

Interviewees from oversight agencies, in general, were very open to criticising their own organisations and to highlighting the issues and challenges they face in their work. The shortage of professionals trained to confront the increasing fraud and corruption threats was the main challenge indicated by oversight agencies. These

²⁰ '*Makleen el balad*' can be translated literally to mean 'they have eaten the country', or they plunder the country's resources.

agencies rely largely on the Jordanian Association of Certified Public Accountants (JACPA) and private audit firms to provide them with forensic expertise, as the following extracts illustrate:

Here we allocate the work, as financial crimes and computer crimes, for example. Now we don't have people to work as specialists in financial audit and financial issues. But, it is the opposite with computers. We have computer specialists who try to keep pace with the developments that are happening. However, we don't have financial specialists. (Abdullah)

We have auditors and financial experts. However, depending on the nature of the case under investigation, we usually need to contact professionals from the JACPA or sometimes big audit firms. (Akram)

Our internal and external auditors, our technical experts — who usually have lengthy related experience — and chartered accountants — usually from the JACPA or big audit firms — usually form investigation teams to deal with the forensic-related and corruption cases that we investigate. (Hamza)

Likewise, audit firms indicated a shortage of professionals able to deal with forensic accounting issues. Interviewees from the Big Four, along with those from some of the other auditing firms in Jordan, made it clear that they do provide forensic-related services such as financial investigations, disputes resolution, and forensic technology solutions. However, they indicated that these forensic-related services are usually provided by the risk department and not by stand-alone forensic accounting departments. The audit firms also pointed to a shortage of skilled and experienced staff to operate their forensic accounting services. Audit firms in Jordan rely heavily on overseas-trained forensic accountants to fill the gaps in the country's financial workforce. Khalil, a forensic accountant, clarified this point when he said:

Unfortunately, from dealing with biggest international firms, Arabs specialised in forensic accounting, in practising, even in the big accounting firms, are rare. Unfortunately, most of those who are responsible for it [forensic accounting in Jordan], and in the Arabian Gulf countries as well, are British.... Even for those who work with EY, for example, the investigation processes that I have done with them, they brought a person from Scotland Yard. (Khalil)

Similarly, Isam argued that auditors in Jordan in general lack the knowledge, skills, and other competencies needed to perform their work competently. Isam explained that being a CPA or a JCPA in Jordan does not necessarily translate into being a competent auditor with up-to-date and relevant knowledge and skills, as the following comment shows:

The problem is that people take the CPA which is an excellent and strong certificate and gives you wonderful information. However, frankly, the CPA is based on the American accounting system, and the American standards are not applied here. The second problem is that the certificate that they recognise here for auditors is the JCPA. Any Arabic material in the world is at least one year behind. If the JACPA was doing its job in a great way, 100% they will be one year behind. As you know, there are modifications on the IFRS every 3 months. So there is no follow-up unfortunately. (Isam)

Hence, the participants believed that forensic accounting education will help to provide the market with both entry-level and specialist forensic accounting practitioners and, thereby, help in tackling the mismatch between the supply and demand for forensic accountants in Jordan. Ashraf, a professor of accounting, described the efforts made to develop a forensic accounting undergraduate programme in 2013 at ABC²¹ University. He stated that, using an international audit firm, his school developed a questionnaire to explore the need for forensic accounting in Jordan and the Middle East. According to Ashraf, the findings of the questionnaire suggested a need for forensic accounting education and services. On the basis of these results, the department of accounting at Ashraf's university prepared a curriculum for an MBA programme in forensic accounting. However, Ashraf explained that they were not able to go ahead with the programme because of a lack of sufficiently qualified academics (see section 6.4.2 for details).

Additionally, Ashraf and Adam, among others, perceived a substantial potential for forensic accounting job opportunities for Jordanians in the Gulf Countries. Given Jordan's geopolitical position and small-sized economy (see section 2.4), Adam expected that the forensic accounting market in Jordan would reach saturation in a similar way that the market had become saturated with IT specialists in the late

²¹ University pseudonym.

1990s. However, Adam thought that, at the point of saturation, Jordan would be exporting forensic accountants to the Gulf countries.

I think initially you will have a supply demand situation where it goes in the favour of the specialists, so they are going to obviously supply the market where there is little supply available. So I think they will be able to find employment. However, I think at some level there would be saturation. So if you take IT as an example. IT first came up in the late 1990s early 2000, and many people were very interested thinking that this is going to be the next best thing; because there is a huge shortage for that, but then at some point there was some saturation. And I think what happens that (...) as we train so many people in so many different professions, obviously they can move on to work in the Gulf, which is perhaps the number one employer of Jordanians outside Jordan. (Adam)

6.3.2 Re-establishing the accounting education connection with the political and social world.

Beyond enhancing graduates' skills and hiring potential, several participants explained that forensic accounting education provides public benefit to society as a whole on the grounds that it has the potential to re-establish the accounting education and profession connection with the political and social world. They argue that integrating forensic accounting into the accounting curriculum will prepare students to better understand the effects that accounting has on society and the implications that businesses hold for economic growth, wellbeing, and sustainability. Participants believed that accounting academics underestimate the extent to which accounting influences, and is influenced by, social and political factors. They claimed that accounting curricula in developing countries, and in Jordan specifically, tend to have a totally technical orientation, although technical knowledge is inadequate as the basis of accounting education (Cooper & Cooper, 2005; Sikka et al., 2007). Hence, Faris believed that forensic accounting has the potential to reestablish a connection between accounting topics and the political and social world. Similarly, Adam argued that teaching forensic accounting provides "completeness" to the accounting programme by highlighting the social and political dimension or "missing link". The following interview excerpts illustrate Faris's and Adam's viewpoint:

I think it is important to have forensic accounting in the curricula, especially that it involves issues, let's say, that have political dimension. This point is important I believe. I think this thing is not available in Jordan. That is, the economy in Jordan has been disconnected from its political aspects, although the economy and politics are inseparable, [the] mutual influences between the economy and politics. In Jordan, unfortunately, economics schools, for example, and management and business administration schools are disconnected from political science. At Cairo [University], they have a school of political science and economics, on the basis that economics is an access to politics and politics is an access to economics. Accordingly, I think incorporating forensic accounting [into the accounting curricula] provides important political access to the economic aspects in teaching. (Faris)

It is not just [about] graduating forensic accountants. But I think adding that angle provides the missing link, if you will. So I do think the most beneficial part is, I think, provides an additional part of the story, makes the student understand what the accountant does in general. (Adam)

Support for these arguments can be found in the extant literature where, Samkin and Stainbank (2016) note, accounting education in developing countries fails to address the social and political contexts of accounting, which “means that issues surrounding social justice, for example, the environment or human rights, are either ignored or covered in a superficial manner” (p. 300). This lack of political and social emphasis presents challenges for the curriculum reform endeavours that seek to address the issues raised by financial scandals (Cooper & Cooper, 2005). Social consequences of fraud and corruption, corporate social responsibility and tax avoidance, and accounting as guardian of the public interest are examples of critical issues that would typically be raised in forensic accounting courses. Adopting such a critical and sociopolitical perspective and course content can help accounting students appreciate their actual position and expected role in business and society (Low, Davey, & Hooper, 2008; Sikka et al., 2007)

6.3.3 Improving graduates' ethical decision making.

This study goes beyond the long-standing debate over whether the philosophically based traditional approach to teaching ethics works (Charles, 2011; Drumwright, Prentice, & Biasucci, 2015) and presents a ‘forensic accounting approach’ to teaching business ethics. In line with Thorne's (1998) integrated model of ethical decision making, this study finds that forensic accounting education has the

potential to improve students' ethicality through improving their moral sensitivity (identification of dilemma) and moral judgment (prescriptive reasoning). Several participants believed that fraud and corruption, as societal ills, could be confronted through education on the causes of and potential remedies for such ills. Accordingly, the participants suggested that the integration of forensic accounting topics into the accounting curriculum has the potential to increase future graduates' willingness to behave ethically. The following comments support this suggestion:

Ok, see, when you teach forensic accounting, and you correct me as well, if you study a course about 'If a crime has been conducted, what will be the consequences?', I think he [the student] will understand that if he conducted any violation what the penalty is going to be. He will pay attention to that, eh, he will avoid the negligence. Because in the practical world, if some mistakes are intended, sometimes accidental mistakes may result in theft or fraud. (Ammar)

Of course, of course, he [the person] will feel more responsible. I mean if he wants to do something unethical he will be very careful about what will happen to him, what his future will be, what misfortunes will follow as a result. (Hashim)

More specifically, participants believed that exposing students to the various types of fraud and corruption would improve their ability to spot and analyse ethical issues and potentially fraudulent situations. This argument is also supported by Drumwright et al. (2015), who assert that people are better equipped to identify ethical issues and make ethical decisions if they are aware of the ethical aspects of an issue that they face. Drumwright et al. (2015, p. 438) explain that:

many people are (over) confident regarding their character, and assume that because they are good people, they will do the right thing if they encounter an ethical issue. If they are not paying attention however, they may not see the ethical aspects of a decision they must make. People are often so focused on pleasing their boss, fitting in with the team, or hitting bonus targets that they do not see ethical issues that are right in front of them.

Drumwright et al. (2015), however, proceed to argue that even if people are aware of an ethical issue that faces them, they may still be vulnerable to ethical missteps. Hence, Drumwright et al. (2015) suggest that moral awareness must be significantly supplemented with motivation and courage to act ethically. "Ethical motivation is

the degree of commitment to taking the moral course of action, placing moral values over other values, and taking personal responsibility for moral outcomes” (Armstrong, Ketz, & Owsen, 2003, p. 8). In this context, participants urge the use of case studies to enhance ethical motivation and encourage accounting students to relate professional responsibilities and ethical principles to their work. Participants explain that case studies of corporate scandals and tax evasion, earnings fraud, Ponzi schemes, and other common white-collar crimes can play a significant role in helping students to understand the implications of fraud and unethical behaviour (see section 8.4 for a related discussion). A better understanding of these implications might provide students with the motivation to avoid unethical decisions when they face ethical challenges.

To conclude, the participants in this study perceived an increasing demand for and interest in forensic accounting education. Participants mentioned three main advantages to teaching forensic accounting in Jordan: first, enhancing graduates’ competencies to meet market needs and providing the market with both entry level and specialist forensic accounting practitioners; second, re-establishing the accounting education connection with the political and social world; and, third, improving graduates’ ethical decision making.

6.4 Barriers and Challenges to Forensic Accounting Education

Although questions about barriers to teaching forensic accounting at Jordanian universities were put to all the participants, the main contributors to that discussion were academics. Practitioners and other participants made a marginal contribution to the discussion, but mainly from a ‘former students’ perspective, because they felt they lacked awareness of the academic and financial abilities of Jordanian universities. Participants perceived four main barriers and challenges for teaching forensic accounting in Jordan: first, the narrow, irrelevant, and crowded existing accounting curricula; second, the lack of enough qualified academics who can teach forensic accounting; third, the lack of relevant forensic accounting learning resources; and, fourth, the students’ lack of interest in studying a new, potentially challenging, topic such as forensic accounting. These four matters will be discussed in the coming subsections.

6.4.1 The irrelevant, crowded, and narrow accounting curricula.

Appreciating the incentives and barriers that exist to teaching forensic accounting in Jordan requires an understanding of the wider accounting education situation. Therefore, this subsection reviews the participants' perceptions in relation to the challenges that accounting education in Jordan faces. This subsection also presents the participants' suggestions on what needs to be done to improve accounting education in Jordan. Thus, the findings of this study, while contributing to the forensic accounting literature, also provide a basis for a comprehensive review and revision of the current accounting curriculum and accounting education in Jordan.

All the participants expressed dissatisfaction with the existing accounting curricula. This study finds that a gap exists between accounting education and professional practice in Jordan. The participants criticised accounting curricula that they saw as being shaped too much by accounting curricula in Western universities. Nabil and Waseem, among others, raised questions about the relevance of these accounting curricula to the Jordanian context, given the huge differences between Jordan, as a Middle Eastern developing country, and Western developed countries. The following comments illustrate the participants' thinking in this area:

I would say that accounting curricula in Jordanian universities are greatly influenced by those of Western universities, specifically the USA and UK, where most academics in Jordan have completed their doctorate. Now, accounting textbooks written for the USA and UK may not be appropriate for accounting education and the accounting profession in Jordan, given that the two have completely different taxation systems, regulations, and economic situations. (Saleem)

I believe that Western accounting curricula are deficit in meeting the needs of accounting stakeholders in Jordan. I think that accounting should be expressed using examples and symbols from our own culture and business environment. I believe this will make more sense for our students. (Ali)

Moreover, several participants argued that accounting departments' use of English as a medium of instruction affects students' performance negatively. This argument has been noted in the extant literature (Hamid, 2009; Sabbour et al., 2010). The

participants explained that as textbooks, and most of the library resources and other study materials, are available only in English, a solid knowledge of English is necessary for students to be able to use them effectively. However, Jordanian students tend to graduate from high school with low proficiency in English and so become more concerned with improving their level of English than with focusing on their courses' teaching content. The following extracts illustrate this concern:

How do we expect students who had their primary, intermediate, and secondary school education in Arabic to shift, all of sudden, to universities where English is the primary, or even the only, medium of instruction? (Waseem)

The problem that we are suffering from is the English language. If the book was in Arabic, of course, he [the student] will study it and understand it...the constraint that may face anyone is the English, not the content of the course, because in the end it could be understood. This is my opinion. I am talking about myself when I was a student, and even now while preparing for the CPA exam. When I translate the question, I find that I understand it and nothing is hard. (Nabil)

Nonetheless, this study finds that most participants, and academics particularly, do not support developing accounting curricula in the Arabic language (or the 'Arabisation' process). This finding is in line with the extant literature (e.g., Nusair, 2013; Sabbour et al., 2010). The participants reasoned that English is the predominant language of business worldwide and in Jordan. Accordingly, studying accounting in English helps to make students more sought-after in a highly competitive job market. In addition, the participants believed that it is important that students master the English language in order to keep up with worldwide accounting literature, the majority of which is published in English. However, two solutions that have the potential to help students deal with the existing English-taught curricula were suggested. These solutions are to use a mixture of Arabic and English in lectures and to provide students with, or refer them to, supplementary Arabic learning resources.

Although, as I said, I found it hard myself as a student to study accounting in English. I used to ask myself: Why don't they just teach us in Arabic. But now I think studying accounting in English is very important, because now every day in our work we need to deal with companies that contact us in English. Also it is important if you think

about getting a professional certificate or pursuing your higher studies.
(Jawad)

I think we don't need to switch completely from English to Arabic, but the lecturer can give the lecture mainly in English and explain in Arabic when needed. Also, as I said before, the lecturer should provide students with case studies from our environment. These case studies could be in Arabic. We will be killing two birds with one stone, [hahaha], solving the English [language] problem and providing students with more relevant materials. (Tariq)

The majority of participants argued that the Higher Education Accreditation Commission, as the only body that is responsible for planning and implementing the curricula (see section 2.5), deserves “the lion’s share” of the blame for the irrelevant and out-of-date accounting curricula. As noted in the background chapter, the participants noted that many of the accounting curricula in Jordanian universities offered similar, or even carbon copy, course outlines and course topics, which indicated a lack of “innovativeness” and a “stalemate”. The participants blamed the Higher Education Accreditation Commission, arguing that the curriculum framework imposed by the Commission (see Appendix 3) leaves no room for innovation in curriculum design.

The situation here is that the same person has been teaching the same curriculum for 20 years. All universities need to follow the curriculum imposed by the Higher Education Accreditation Commission, which has never been reviewed maybe for the last 2 decades. (Khalil)

I think the programme is very, it is not dynamic, I mean, as I was preparing for this interview, I went and I really looked through accounting programmes in Jordanian universities, and there is a really high similarity between them, and this means that the innovativeness is not there. (Adam)

This study finds that the crowded accounting curriculum imposed by the Commission is a common potential obstacle facing forensic accounting education. Participants criticised the inclusion of several course topics that were perceived to be entirely irrelevant to accounting. This finding is in line with the comments made in chapter two (see section 2.6). According to the participants, a large proportion of the accounting curricula is allocated to irrelevant general subjects imposed by the Higher Education Accreditation Commission (HEAC) (the accounting curriculum

framework imposed by the HEAC is shown in Appendix 3). This criticism was voiced by Jamal:

The accounting curricula at our universities is irrelevant. They include weak irrelevant papers in the curriculum such as military science, Arabic and English languages, embroidery²², and other fiddling things. (Jamal)

These ‘nonaccounting’ courses are being taught at the expense of more relevant courses such as forensic accounting. Interviewees argued that there is no room in the already crowded curriculum to include an additional course to cover forensic accounting topics. For example, Fadi contended that although forensic accounting is an important topic, other topics may take priority over forensic accounting when it comes to integrating it into the accounting curriculum. He said:

Are there advantages [for teaching forensic accounting]? Of course, there are advantages. However, there could be a bigger disadvantage. For example, to ignore a more important topic or course...because, frankly, many people here require the addition of a paper on statistics, better! Students here are graduating weak at statistics. (Fadi)

Finally, participants criticised traditional teaching philosophy and methods in teaching accounting in Jordanian universities. They argued that accounting curricula need to rely far more substantially on modern teaching methods that acknowledge the importance of group projects and class participation than the existing curricula currently do. They saw the lack, or absence, of profession-university contact and cooperation as a major problem facing accounting education in Jordan. In addition, the participants suggested that, to train accounting students, accounting departments in Jordanian universities should place more emphasis on fieldwork and training courses through agreements with appropriate firms and organisations.

Most teaching methods in the departments of accounting are just based on lectures that do not allow the opportunity to participate, do research,

²² Accounting students at Jordanian universities are required to study two courses that must be selected from a list of ‘elective courses’ offered by colleges other than the college of Business and Administrative Sciences (Yarmouk University, 2017) (see Appendix 4 for an example of an accounting syllabus at a Jordanian university).

or be creative. So when we moved from the university to the real world, we found ourselves, as auditors, far away from reality. There is a huge gap between what accounting educators teach at Jordanian universities and what practising accountants actually do. (Waseem)

Unfortunately, most people graduate from university unqualified, in either accounting or auditing. Universities still use the traditional boring spoon-fed teaching method. Based on the existing system, they actually graduate when they have just started to understand the field. The student wants to go to university just to pass. Professors even have no enthusiasm because they know their system; the semester will start and finish and that is it. I mean, they have no connections with auditors, for example. They know that it is just theory. (Tariq)

Building on the extant literature (e.g., Cook-Sather, 2002; Nunan, 1988; O'Neill & McMahon, 2005; Samkin & Stainbank, 2016; Sikka et al., 2007; Tan & Laswad, 2015), this study suggests that the key factors for the improvement of accounting education in Jordan include: introducing up-to-date textbooks, references, and teaching materials; using local environment case studies and experience in teaching; using a mixture of Arabic and English in lectures, and referring learners to supplementary learning resources in Arabic; a revision of the curriculum framework imposed by Higher Education Accreditation Commission; and, the adoption of modern interactive learner-centred teaching approaches. Participants' views and suggestions regarding forensic accounting teaching strategies are considered in more detail in chapter 8.

6.4.2 The lack of qualified academics.

Several potential barriers to teaching forensic accounting at Jordanian universities were mentioned. The most common barrier was the lack of qualified academics. This barrier has already been pointed out in section 6.3.1 while describing the ABC University's efforts to develop what it hoped would be the first postgraduate forensic accounting programme in Jordan. Ashraf, a professor of accounting at ABC University, confirmed that his department had developed a postgraduate forensic accounting programme in 2013 in conjunction with an American university. He went on to explain that his department could not implement the programme due to the lack of qualified academics. In addition, Ashraf explained that attracting forensic accounting academics from Western countries is challenging, given the

modest financial capabilities of Jordanian universities, as the following conversation illustrates:

Me: I have seen news in the media about your development of the first postgraduate forensic accounting programme...

Ashraf: Unfortunately, we could not start teaching this programme at our university.

Me: Can I know the reason?

Ashraf: Yes, one condition for the Ministry of Higher Education and Scientific Research to approve a new specialisation is the availability of four professors who hold the PhD in the specific specialisation that is going to be provided, and we could not make four professors in this field available.

Me: [...] You say that this was the major barrier in front of you. Can you explain please? Is it hard to attract professors from outside Jordan, for example?

Ashraf: You come to someone who has been in America for 30 years and his life is there, and you say to him: Come here [to Jordan], [work] with me. You try to attract him. No matter what salary you want to give him, you will not reach the level that he has already reached [there].

Me: Don't you think it may be easier to attract an Arab who went overseas just to study forensic accounting, for example?

Ashraf: You are right. I can attract you [for example]. But we still have the same problem. How many people like you do we have? I need four to start. To get an approval from the Higher Education [Ministry], I need four. You see? As far as I know, maybe, you are the only one who is studying this topic. No one is getting out of the audit crucible. You see? This is the situation.

As with Ashraf, the other participants underlined the lack of sufficient numbers of qualified academics as a major potential barrier facing universities that wish to teach forensic accounting. This issue cropped up at least 12 different times during discussions with academics.

Likewise, government agency interviewees highlighted the difficulty of finding qualified instructors to provide forensic accounting-related training courses. Both managers and auditors at oversight agencies perceived the lack of sufficiently qualified instructors as the main barrier to setting up forensic accounting training courses, as the following comments demonstrate:

We asked about the subject, training about forensic accounting, financial crimes, and administrative investigation. And, unfortunately, we did not find, you know, people to provide us with this training.
(Thair)

One day they asked a professor from ABC²³ University to give us a training course. We asked him throughout the course about issues that we are struggling with in practice, but he was not helpful. He would come and say, in an American accent trying to prove that he graduated from America, [hahaha]: I have 15 years' experience. However, when you come to discuss the topic with him he doesn't know anything.
(Yasin)

Furthermore, it was noted that oversight agencies have doubts around the Jordanian academics' capabilities to teach forensic accounting. For example, Imran said:

There are no professors, with respect to them as they would still to be our instructors, but they do not have competency in this field, because competency in this field comes only through practising this field.
(Imran)

Oversight agencies usually coordinate with Western governments and institutions in developed countries to provide such specialised training courses. For example, the Jordan Anticorruption Commission (2012) organised a “forensic audit and forensic accounting” training course—*mohasaba wa tadqeeq jena'ei*—in cooperation with the Finnish government. Employees from the Audit Bureau, Anticorruption Commission, Securities Commission, Companies Control Department, and Income and Sales Tax Department have attended this training course.

²³ University pseudonym.

This study suggests that overcoming the negative pressure from traditional academics in an attempt to persuade them to accept forensic accounting could be a daunting task. As discussed earlier (see section 6.2), many academics will resist integrating forensic accounting into the accounting curriculum if they have not had time to become familiar with the concept, its importance, and the potential advantages of forensic accounting. Ibrahim explained that accounting academics at Jordanian universities are unwilling to step outside their zones of expertise. Thus, he expects that the majority of accounting academics at Jordanian universities will feel unconfident and/or uncomfortable with forensic accounting, given that it is a relatively new research topic.

A girl at AB²⁴ University wanted to conduct a study. They [her department] sent me her proposal...She found my number while doing some research on the Internet...She wanted to write her master's thesis on forensic accounting. We prepared everything and she submitted it [the proposal] to her professor. He [her professor] submitted the proposal to the department, and the whole department said we don't have anyone who knows [about forensic accounting]. Another one said: There is nothing called forensic accounting; it is the first time I've heard of 'forensic accounting'! This happens at the university! They don't give any attention to this topic [forensic accounting]. They are not interested in learning or teaching a new topic. This is the problem that we are suffering from. The professors' level in forensic accounting here [in Jordan] is very low. Not only in Jordan, in the whole Arab region. (Ibrahim)

Similarly, Khalil pointed to the inertia among academics as an important barrier to forensic accounting education. He argued that many traditional academics are happy with the Higher Education Accreditation Commission curriculum framework, because the bureaucracy saves them from having to expend the time and effort that ought to go into curricula change and reforms. Khalil believed that forensic accounting education would find itself on a collision course with many traditional academics who usually take a cautious and sceptical attitude toward any curriculum addition or change.

Most of the professors at Jordanian universities just studied books and memorised books. Man, they used to teach us a curriculum from the old

²⁴ University pseudonym.

days. Those professors will resist any change, any new things, including forensic accounting. (Khalil)

Furthermore, Saleem explained that due to the tough economic situation in Jordan, academics lead busy lives working in more than one university or running their own businesses in addition to lecturing at a university. According to Saleem, these extra demands limit the time available for innovation, reviewing the curricula, and integrating new topics such as forensic accounting. Similarly, Fadi and Ali argued that the majority of accounting academics are unlikely to accept integrating forensic accounting into the accounting curricula unless they are significantly pressured to do so, or rewarded for doing so, as the following comments show:

If my salary were to improve or I were to get other improvements I will go and read about it [forensic accounting]. Frankly, now I am studying for CMA. I saw that the CMA is not hard and that it would improve my situation so I started thinking about taking it. So, in the end, it is how to motivate the professor [to read about forensic accounting]. (Fadi)

They [academics] will view forensic accounting as requiring them to acquire new skills and knowledge and to learn new teaching skills. They will think: Why would I read and prepare for this new paper if these extra efforts will not be reflected in financial compensation or a higher status. (Ali)

Solutions to the lack of enough qualified academics and relevant forensic accounting learning resources are presented in the following subsection.

6.4.3 The lack of relevant forensic accounting learning resources.

This study finds that another major barrier to forensic accounting education lies in the lack of adequately detailed and relevant forensic accounting textbooks and learning resources. According to the participants, the existing books on forensic accounting are basically inadequate, as they are written mostly for practitioners and academics in the Western world. Ashraf made that point when he said:

When you come to teach forensic accounting to the bachelor students, you should present cases. I don't think we have in our culture such cases to teach our students. So at the end of the day, the professor will come back and bring international cases, and provide those to our

students...However, in this case, there is a difference in the culture and business environment, and this is a problem. (Ashraf)

The adoption of books and other learning resources from the Western world should be subject to thorough revision, modification, and adaptation to the Jordanian environment. Hence, the participants believe that forensic accounting education will initially have to rely heavily on the personal experience and efforts of the academics who are supposed to develop the curricula, which again highlights the problem that there is a lack/scarcity of qualified academics in Jordan who can teach forensic accounting.

This above discussion indicates that the lack of enough qualified academics and the lack of relevant forensic accounting learning resources are actually two related problem areas. This study builds on the literature by proposing two possible integrated solutions to these two problems. First, it suggests the adoption of a blended teaching model that combines traditional with modern learning methods and resources. In other words, the lack of 'context-relevant' forensic accounting 'textbooks' should not be seen as a general 'lack of relevant learning resources'. Technology is changing education, allowing a much longer menu of learning resources than was available 2 decades ago (Lane & McAndrew, 2010). All Jordanian universities have computer labs and access to the Internet, digital, social, media, and multimedia resources that are available online and these resources should be utilised in teaching forensic accounting. Modern and interactive learning resources and activities such as case studies, debates, group discussions, and presentations based on these online resources can be developed (Beetham & Sharpe, 2013). Such a modern learning environment would not only ensure the active involvement of all students in the process of learning, but would also encourage instructors as well as learners to produce alternative resources (Larson & Murray, 2008). In addition, research (e.g., Cook-Sather, 2002; Nunan, 1988; O'Neill & McMahon, 2005) strongly supports the potential of interactive learning, where instructors view their role as facilitators and their work as an opportunity to refine their knowledge and practice (Hmelo-Silver & Barrows, 2006) in order to support the instructors' own development. Thus, the adoption of a modern and interactive

learning model as a way to teach forensic accounting may, over time, contribute to the development of qualified academics to teach forensic accounting.

It is worth mentioning that this study recommends the adoption of a blended teaching model, rather than a purely online model, because “for many teachers, a blended or hybrid model that combines traditional face-to-face with technology-enhanced teaching will be a less threatening way to leverage their effectiveness through technology” (Larson & Murray, 2008, p. 88). This point holds particularly true for accounting departments at Jordanian universities, where teaching is done mainly through traditional lecturing (see section 6.4.1).

Second, accounting departments should work to address the shortage of qualified forensic accounting academics and relevant resources by establishing relationships with oversight agencies and professional associations and also by developing ties with audit firms and the private sector. It is hoped that the mutual benefits of such academic-industry collaboration would include the following: funds for universities to undertake research and develop forensic accounting curricula; case studies and data that can be used in teaching and research; research needed for industry; guest lecture events where speakers might be academics or practitioners in either classrooms or seminars and workshops; education and training opportunities for practitioners; and, academic assistance in developing and implementing anticorruption and integrity initiatives.

6.4.4 The students’ lack of interest to study a new, potentially challenging, topic.

Students’ lack of interest in studying/motivation to study the topic was seen as another major barrier to forensic accounting education. The participants explained that students are mainly motivated to obtain “that piece of paper with a degree on it” rather than to acquire knowledge and skills. Therefore, irrespective of its advantages, students are unlikely to be interested in a new paper/challenge such as forensic accounting. For participants, parents’ and society’s passive attitude towards business professions, the “unfair” higher education admission system (see

section 2.5 for details), as well as the tough economic situation are all key factors that contribute to the students' lack of interest, as illustrated in the comments below:

You know, many university students need to work long hours to get money to pay their university fees. They don't enjoy their university life. They don't have enough time, resources, or peace of mind that allows them to think about knowledge or new things like forensic accounting. They even know that more knowledge, or even high grades, does not guarantee you a good job in our countries. They know that *wasta* is usually the key. Thus, they want to finish as soon as possible so they can work and start their lives or help their parents or help their brothers who are still studying at university. (Waseem)

Students in our universities, unfortunately, do not want to study, because their parents put them under pressure to study this or that field. They do not like what they are studying, so how can they be creative and successful? You know in our society people believe that fields like medicine and engineering outperform the business and literature fields, which [the business and literature fields] have been made for students who get low grades in *tawjihi* (high school).

This result is consistent with prior study (Tan & Laswad, 2006) which indicates that three key determinants of students' intention to major in accounting or other business disciplines are: student's attitude towards accounting as his/her major (personal factor); the student's beliefs about the referents'—and in particular parents'—perception of the accounting profession (referents factor); and, the student's beliefs about how easy or difficult it is to complete an accounting programme successfully (control factor).

Again, this study highlights the key role that academic-industry collaboration might play in overcoming barriers and challenges facing forensic accounting education in Jordan. In this context, this study suggests that academic-industry collaboration is likely to enhance students' interest in, and benefit of, studying forensic accounting in two ways: first, by raising awareness about the concept, importance, and abundant job opportunities in forensic-related careers through publications and seminars; and, second, by providing students with forensic accounting-related internship and job opportunities.

To conclude, the participants referred to four main barriers to forensic accounting education, namely: the irrelevant, crowded, and narrow accounting curricula; the lack of enough qualified academics; the lack of relevant forensic accounting resources; and, the students' lack of interest to study a new, potentially challenging topic, such as forensic accounting. Overcoming these barriers requires multilevel partnerships involving learners, education providers, and practitioners from both the private and public sector in Jordan.

6.5 Summary

This chapter has looked at critical issues in relation to the study's first research question: "What incentives and barriers surround forensic accounting education in Jordan?". The chapter first explored the participants' familiarity with, and understanding of, the term forensic accounting. In addition to academics, this research provided an opportunity to interview at least one participant from each of the following areas: major oversight agency in Jordan (see section 7.3), the Big Four accounting firms, employees of other Jordanian audit firms, theologians, and a member of the Jordan Association of Certified Public Accountants' board of directors. Although the work of the majority of those participants centres around antifraud and anticorruption issues, all the participants demonstrated low levels of familiarity with forensic accounting, both as a term and a profession, or that creating interest in forensic accounting in both business and academia is essential to promote forensic accounting education. This finding becomes particularly important in the Jordanian context, where the perception of knowledge is largely 'value-oriented' (see section 3.3). This issue will be discussed further in chapter 8.

In addition, a wide disparity in the participants' understanding of the term forensic accounting was noticeable. Those interviewed used a range of terms referring to the concept of forensic accounting, for example, forensic audit [*tadqeeq jena'ei*] judicial accounting [*mohasaba qada'iyah*], and fraud investigation. This conceptual and terminological confusion suggested some ambiguity around the term forensic accounting on the part of the study's participants. Furthermore, several participants expressed their concern with the use of the term forensic accounting [*mohasabah jena'eyiah*] because they perceived it as an unfamiliar term that also had a negative

connotation. The careful use of appropriate and acceptable terminology is, thus, essential in promoting forensic accounting services and education.

Discussion with the interviewees revealed that the development of forensic accounting education and practice is of utmost importance to Jordan. Although this process will be challenging, the benefits it will provide will be invaluable. Forensic accounting education has the potential to enhance accounting graduates' ethics and antifraud knowledge and skills and, therefore, to more effectively match graduates' competencies with employers' expectations. Furthermore, studying forensic accounting exposes learners to subjects that help them to gain an understanding of the rich intersection between accounting and politics. In addition, forensic accounting education will tackle the mismatch between the supply and demand for forensic accountants in Jordan. Oversight agencies are eager to equip their employees with higher levels of corruption detection, prevention, and analysis skills and knowledge through forensic accounting training and education. Forensic accounting education has the potential to push forward anticorruption strategies and reduce opportunities for fraud in Jordan.

Participants suggested several potential barriers to the development of forensic accounting education in Jordan. These barriers can be classified into two categories. The first category covers education-related barriers, which include the inflexible and crowded accounting curriculum; the lack of enough qualified academics; and, the lack of relevant forensic accounting textbooks and learning resources. The second concerns socioeconomic factors that negatively affect learners' motivation to study, in general, and to study a new topic such as forensic accounting, in particular. These socioeconomic factors encompass both parents' and society's passive attitude towards business professions and the tough economic situation in Jordan.

Accounting education in Jordan proved to be a criticism-stimulating topic for discussion. A considerable amount of dissatisfaction was noticeable among the participants in terms of the quality of accounting education, in general, and the accounting curriculum, in particular. The participants believed that the Ministry of Higher Education, universities, and professional bodies need to take many actions

to enhance and improve the environment of accounting education in Jordan. The interviewees identified several areas of concern and made suggestions for improving accounting education in Jordan. The irrelevance of the current accounting curricula to the business and legislative environment of Jordan is a major problem. They criticised the widespread adoption of Western accounting curricula with no adaptation to the Jordanian environment. Moreover, several participants criticised the use of English as the only medium of instruction for accounting at Jordanian universities. Furthermore, they saw the Higher Education Accreditation Commission curriculum framework as a major reason for the absence of any positive change in or updating of the accounting curricula over the last 2 decades. The inclusion of irrelevant, obligatory course topics and the lack of coverage of some important subject areas were also perceived to be key issues that result from the curriculum framework imposed by the Higher Education Accreditation Commission. Another major shortcoming in the accounting curricula is their heavy reliance on traditional textbooks, lectures, and written exam-based teaching approaches at Jordanian universities. Teaching in accounting departments in Jordanian universities is done through lecturing, often in the traditional mode of stand-and-deliver. The course textbook and accompanying slides and overhead projector are the only learning resources utilised in this traditional mode, and the style of student learning is largely rote learning and memorisation for an exam, and then for forgetting.

While many of the accounting problems and barriers to forensic accounting education in Jordan are the same as those in the West, these problems appear larger and more intractable than in the developed world. Key solutions to the barriers and challenges to forensic accounting educating in Jordan are the adoption of a blended teaching model that combines traditional with modern learning methods and resources in conjunction with the establishment of academic-industry collaboration.

The next chapter deals with the second research question.

Chapter 7

Findings on Research Question 2: Reforms Necessary to Develop Forensic Accounting Practice and Education in Jordan

7.1 Introduction

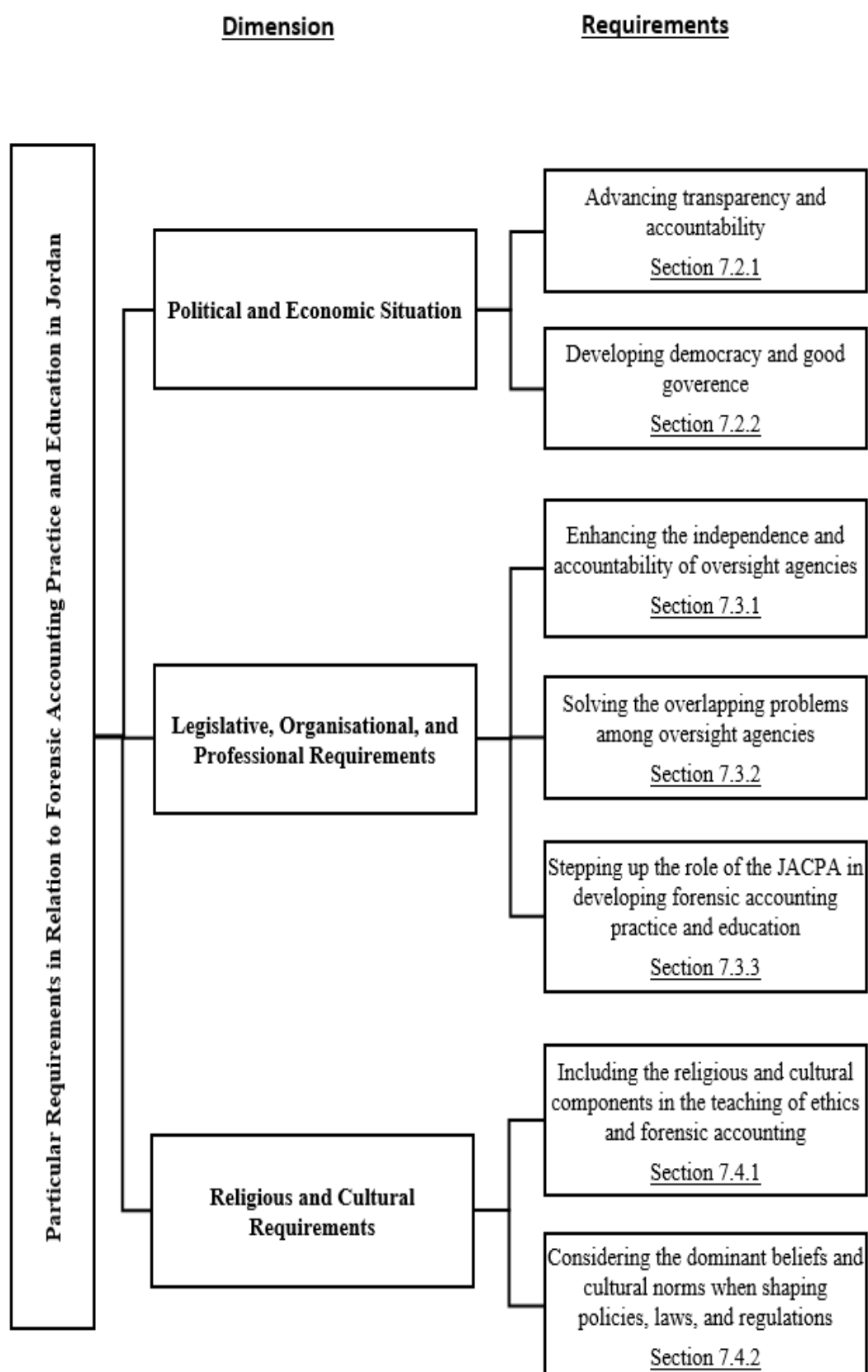
The chapter addresses the second research question: What reforms are necessary to develop forensic accounting practice and education in Jordan? This chapter explores key requirements for fruitful forensic accounting practice and education in Jordan, with a focus on particular requirements in relation to Jordan's political and economic situation, the country's regulatory and professional environment, and its religious and cultural requirements. This exploration of the complex context in which forensic accounting practice and education is developed is necessary for better-informed forensic accounting curriculum decisions that respond to challenges and opportunities for forensic accounting education, the demands and interests of the accounting industry, and a wide spectrum of stakeholders (Alkubaisi, 2016; Baker, 2016).

Given the growing threats arising from fraud and corruption, the participants perceived huge demand for forensic accounting in Jordan, as discussed in the previous chapter. Forensic accounting can do a lot to curb fraud and corruption, if adapted with consideration of different contexts (Gibson, 2010) and applied impartially (Huber, 2013; Rezaee et al., 2004). Hence, major reforms to the political, economic, regulatory, and judicial systems are needed (see sections 2.2 and 2.4) to 'pave the way' for effective forensic accounting practice in the Jordanian public and private sectors. Moreover, the dominant beliefs and cultural norms in Jordan must be considered when shaping the country's policies, laws, and regulations, as well as when practising forensic accounting (see section 2.3). Key requirements and necessary reforms for fruitful forensic accounting practice and education in Jordan are illustrated in Figure 7.1 and discussed in the subsections that follow.

Following the introduction, the first section explores the relationship between Jordan's political and economic situation and fraud and corruption. This exploration goes beyond existing literature (e.g., Alemu, 2012; Campos, Lien, & Pradhan, 1999; Azam, Hassan, & Khairuzzaman, 2013; Hassan, 2004; Seligson, 2002), which focuses largely on showing that 'corruption is harmful', to an exploration of how it operates in a Jordanian context and to recommend suitable reforms. The second section provides a review of anticorruption initiatives and agencies in Jordan. This review aims to explore the reasons behind the failure, or limited success, of the existing anticorruption initiatives and efforts in Jordan (Amnesty International, 2017) and to identify success factors and requirements.

The third section reviews the participants' opinions and comments regarding the potential influence of both Islam and culture on Jordanians' perceptions of fraud and corruption and forensic accounting. This review is essential for successful application of forensic accounting techniques in a Jordanian setting (see section 3.4 for a related discussion), as every context has its own idiosyncrasies that affect implementation (Rose-Ackerman & Palifka, 2016). Implications that will emerge from this chapter might be helpful for oversight agencies, government and policy makers, as well as for academic institutions that attempt to develop and provide forensic accounting education programmes. The final section concludes the chapter.

Figure 7.1: Key requirements and reforms for fruitful forensic accounting practice and education in Jordan



Source: Author

7.2 Political and Economic Situation

Participants in this study believed that fraud and corruption are attracting increasing attention in Jordan. This argument highlights a level of interest that reflects the increasing scope of the problem (Alkubaisi, 2016; Schenker, 2015; Transparency International, 2016). In their opinion, the issues of fraud and corruption in Jordan are strongly interrelated with the political and economic situation (Becker & El-Said, 2013; Helfont & Helfont, 2012; Yom, 2009). The interviewees touched constantly upon the same underlying theme, that is, people engage in fraud and corruption because of the widespread feeling that the government is thoroughly corrupt. The following excerpts illustrate that belief:

As long as there is no transparency, no truthfulness, no justice, all these will result in 'As long as that doesn't pay, I won't pay', 'That evades, so I would evade', 'Why should I always be the scapegoat?'. (Ali)

The political aspect forms, to a large extent and deeply, a cover for corruption. This happened as well after the Arab Spring [revolutions]. It was clear that a person who has privilege with the state and got back from the state, even if he has stolen millions, or I won't say millions, maybe billions, he will be covered up one way or another. (Murad)

7.2.1 Advancing transparency and accountability.

Jordan has experienced widespread protests since 2011 (see section 2.2), which have demanded political reform and decried the pervasive corruption in the country (Susser, 2013). The problem of fraud and corruption in the Middle East lies in its complexity that results mainly from the lack of independence in the judicial systems (Martinez-Vazquez, Arze del Granado, & Boex, 2007). The Jordanian legal system is no exception. Several participants stressed that the high incidence of corruption in Jordan is a result of permissive attitudes towards corrupt on the part of influential people. Yahya, a lawyer and a professor of economics, asserted that the slow and unreliable judicial processes in Jordan led to corruption. Indeed, Yahya went further expressing concerns that the judges, who are charged with imposing the penalties, are themselves sometimes open to corruption. The corruption in a justice system occurs particularly when the defendants are politically and/or economically

influential people (Buscaglia, 2001). Transparency International (2016) defined the corruption within the judicial system as

acts or omissions that constitute the use of public authority for the private benefit of court personnel, and result in the improper and unfair delivery of judicial decisions. Such acts and omissions include bribery, extortion, intimidation, influence peddling and the abuse of court procedures for personal gain (p. 1).

The media in Jordan continuously raise grand corruption cases which have been closed or concealed under mysterious and suspicious circumstances (Al-Ghad, 2013; Neimat, 2012; Ishtaiwi, 2012). One interviewee, for example, told of the removal of several corruption charges against former Prime Minister Marouf al-Bakhit and other parliamentarians, ministers, and intelligence officers saying:

Also because this class of opportunistic, pragmatic people, and self-centred people believe in 'give me and I'll give you', 'give and take', 'I cover you up and you cover me up'. Therefore, they abuse their political position to cover up corruption cases. This happened here in Jordan. The cases of the Casino, Social Security, Phosphate, and others. If you actually track these issues, you will find politically influential people, a former intelligence director, a former or current prime minister and ministers. We are now facing a corrupt junta. This corrupt junta does not have any religious scruples. What is the point of having religious scruples for students only? Or just for ordinary people who don't have control over the money. I mean, unfortunately, the people who have control over the economic operation and hold influential positions in the economic sites, such as the banks and others, actually I won't say that the religious scruples is not affecting them, but I may say that, unfortunately, they could have no religious scruples at all. (Murad)

In February 2012, the Prosecutor General in Jordan summoned former Prime Minister Marouf Al-Bakhit and several other senior officials to court as part of the ongoing investigation over a suspected corruption case dubbed 'Casinogate' (Neimat, 2012). The Casinogate case is considered to be emblematic of widespread corruption and economic inequality in Jordan (Najjar, 2011). The case, involving gambling, sparked widespread public anger in the country, as gambling is not only illegal under Jordanian criminal law, but also prohibited for religious reasons and is, therefore, traditionally unacceptable (Caristrom, 2011; Pryor, 2007).

This case began with a multimillion deal which the former Prime Minister Al-Bakhit in 2007 signed with Oasis Holding Investment Ltd ‘a British investor’, to build a casino on the coast of the Dead Sea (Najjar, 2011). The agreement was later cancelled by the government of former premier Nader Dahabi, an action which may expose Jordan to potentially billions of dollars in penalties as a result of breach of contract. Preliminary investigations in 2011 by the Jordan Anticorruption Commission (JACC) revealed there had been legal breaches by the former Prime Minister and the other ministers concerned when the agreement was originally signed in 2007 (Caristrom, 2011). Examples of the main terms of the agreement between the government and Oasis Ltd, which have raised considerable debate in the media and public opinion (Al-Jazeera Investigations, 2013), are shown below. The issues include:

- Oasis Ltd can build and operate two casinos and prepare for the establishment of other casinos subsequently.
- The convention is to continue for 50 years, and the Jordanian government is not entitled in any way to cancel the agreement. If cancelled, the Jordanian government should pay a penalty of around US\$1.4 billion.
- The agreement details are confidential and restricted to the Jordanian government and the company, and each party shall make maximum efforts to limit the spread of all confidential information.
- English law is the reference in any arbitration between the parties. The agreement is in English, and any translation in any other language is not permitted.

The JACC referred its findings to parliament, since parliament was the only body authorised to investigate government ministers. The vote in parliament accused the former tourism minister in connection with the case, but cleared PM Al-Bakhit and 13 other members of his cabinet (Al-Jazeera Investigations, 2013). Hence, in Malik’s estimation, “the institutions we [the Jordanians] rely on to stop corruption could be considered the most corrupt institutions”. Malik referred also to another case which witnessed enormous media attention; the trial of the former Intelligence Chief Muhammed Dahabi, one of the country’s most influential officials. Dahabi was fined nearly US\$30 million and sentenced to 13 years in prison for charges

which included embezzling public funds, money laundering, and abuse of office (El-Shamayleh, 2012). Similarly, Ibrahim argued that regulators themselves are corrupt or completely captured by corrupt key business players in Jordan. Thus, Malik and Ibrahim both warned that corrupt politicians may exploit forensic accounting to their advantage.

All regulations are clumsy. I mean, I say, in Jordan; I won't say anything else. For example, the income tax law that has been applied since 1/1/2015, once it had been issued they said that they were going to subject it to modification. You issue a law that you, yourself, are not convinced can achieve tax justice. This is our problem. Our problem as well is legislative authorities, the parliament or the senate. Those ones legislate things. It is a big problem. I'd say in the Jordanian parliament, 150 MPs, maybe 80 of them are wanted regarding security issues [hahaha]. Not only this, I know an MP who is accused on 17 forgery and tax evasion issues. (Ibrahim)

They [corrupt politicians] will be happy about that, because it would be under their control. I mean they got the control. So they will direct it [forensic accounting] against some people and turn a blind eye to others. (Malik)

Participants stressed that while forensic accounting may help control corruption, the relationship between forensic accounting and fraud and corruption control is not as straightforward as is sometimes assumed. The participants emphasised the point that forensic accounting is a tool that can reduce fraud and corruption (Bologna & Lindquist, 1995; Singleton & Singleton, 2010), but that the fight against fraud and corruption cannot be seen in isolation from the need to reform the role of the state. Isam, for example, explained that the solution to fraud and corruption problems may not be as simple as simply introducing or improving forensic accounting. Rather, the way the government carries out its functions and uses forensic accounting to solve fraud and corruption problems is far more important than having forensic accountants. Isam believed that, at the governmental level, weak decision-making powers to penalise acts of corruption create fertile ground for corruption. According to him:

Even if they know it is against the culture and the religion, like, especially taking bribes for Muslims is haram [sin], so they will say, well you know what, the government is taking over the oil; and that is the resource we have; and we believe that they take more than what they

should give us. I am taking my right. I am justifying it for myself. Exactly, so that's what is happening. Actually, forensic accounting is a wonderful technique and instrument. However, this instrument, at the end of the day, if there is a lack of political will from the decision makers' side to make it effective, it will be useless. The political will should come first. (Isam)

Similarly, Ali argued that the political factors that contribute to corruption include the penalty system, the lack of transparency at the institutional level, and the examples set by leadership. Ali stated that the failure of leaders to tackle corruption is the reason why people no longer take commitments seriously. Ali spelled out the idea that people expect their leaders to live as role models who respect societal norms and values. However, according to Ali, when politicians fail to meet those standards, people start to think that they need not worry about committing a bit of fraud themselves. Moreover, Ali contended that taxpayers' money in Jordan was being plundered, wasted, or spent on useless projects instead of being used to provide better health and education services.

Don't forget another important point here — to provide services for people. Here, for example, they don't provide services. For example, you don't get services. It is nice if I pay tax to get back services, to feel comfortable, to have a comprehensive health insurance, to have excellent schools, to have a high level of tertiary education. Therefore, when you pay [tax], you feel like [you're] throwing money away. Second, you need the tax money not to be wasted, wasted for people, or to be wasted in failed projects because of so and so. (Ali)

7.2.2 Developing democracy and good governance.

Participants emphasised the importance of democracy and good governance²⁵ in fighting fraud and corruption. This argument is in line with Sandholtz and Koetzle (2000) and Blake and Martin (2006) who suggest a strong relationship between democracy and good governance and the minimisation of fraud and corruption. Blake and Martin (2006) assert that “consolidated democracies [specifically] are more likely to reduce the prospects for corruption than non-democracies, unstable

²⁵ The World Bank (1994) identified three distinct dimensions of governance: “(i) the form of political regime; (ii) the process by which authority is exercised in the management of a country's economic and social resources for development; (iii) the capacity of governments to design, formulate, and implement policies and discharge functions” (p. xiv).

democracies, or recently constituted democracies” (Blake & Martin, 2006, p. 4). Blake and Martin (2006) provided three justifications for this assertion. First, the operation of an open political process is more likely, over time, to produce transparent executive agencies, independent judges and prosecutors, and accountable government officials in response to public pressure. Second, accountability mechanisms are more likely to play an effective deterrent role when associated with democracy, public trust, and strong role of law compared to the role it may play in nondemocracies or unstable democracies. Third, the consolidation of democracy helps to develop societal norms and foster attitudes that do not tolerate corruption.

Furthermore, participants assert that developing good governance, which covers areas including public service ethics, tax, competition policies, and public expenditure (the World Bank, 1994), must be seen as essential components of any integrity and anticorruption initiative. This argument is in line with previous studies (e.g., Kaplan & Akçoraoğlu, 2017; O’Connor & Fischer, 2011; Rose-Ackerman & Palifka, 2016; Türedi & Altiner 2016) which found consistent support for the importance of good governance and a range of economic variables including economic freedom and stability, income equality, and legitimate income or fair wages in minimising both the willingness and the opportunity for individuals to engage in corruption. Othman highlighted the idea that both the political impact of the corruption levels and the high level of corruption in Jordan are expected results of the country’s tough economic situation.

The political factor is the key factor. Therefore, if someone is corrupt but has not been held to account, undoubtedly, this contributes to giving legitimacy to this corrupt person, and imposes conditions that force others to be corrupted...So in my opinion, the biggest role is for the political factor first, the political conditions and political corruption...The economic need is another important factor that leads to corruption; its common sense, a needy Man, if we look at history; this will lead to follow any mean to satisfy his need. (Othman)

Similarly, Malik, an Imam²⁶ and a merchant, argued that the unfair tax regulations, high taxation, high inflation, and low incomes are key factors that encourage dishonesty and corruption in Jordan. According to Malik, these factors made people believe that the only way to succeed in business was to circumvent the law.

It [corruption] is normal when tax rates are very high, prices are very high, and people's purchasing power is not very strong. People can neither save nor buy. It is normal that in order to survive, the merchant should be corrupt. (Malik)

This argument is in line with O'Connor and Fischer (2011) and Türedi and Altiner (2016) who examined economic factors that influence corruption in developing countries and found that economic growth, economic fairness, and trade openness facilitate the control of corruption, while low-income levels and decreasing wealth are common features of countries with high levels of corruption. O'Connor and Fischer (2011) explain that

People in poor countries may have greater incentives to engage in corrupt activity because of its relatively high benefits. Low income creates challenges for making ends meet and is likely to create incentives for generating supplementary income. In addition, lower income countries often have fewer financial resources for creating efficient law enforcement institutions, making corruption less likely to be detected and punished (p. 646).

To conclude, as corruption is influenced by several economic and political factors, combating corruption has to be multidimensional (O'Connor & Fischer, 2011). A multidimensional approach to the fight against corruption, according to Heineman and Heimann (2006), requires pursuing four types of measures. The first is enforcement: i.e., the investigation and prosecuting of existing corruption through anticorruption initiatives and forensic accounting techniques. Second comes, prevention: i.e., the enactment and implementation of anticorruption laws and policies to control the opportunities for corruption. The third measure involves state building: i.e., designing and undertaking political and economic reforms to advance transparency, accountability, and the rule of law. The final measure is cultural

²⁶ An Imam is a Muslim religious leader, and the term Imam is commonly used as the title given to someone who leads services of worship in a mosque.

transmission: i.e., transmitting positive values and norms that can sustain the three former measures. Building on the extant literature (e.g., Persson et al., 2013; Rose-Ackerman & Palifka, 2016), this study finds that genuine top-down anticorruption reforms are unlikely to occur in developing countries, including Jordan, unless public pressure is raised. Persson et al. (2013) explain that the key to successful anticorruption initiatives in developing countries is a greater public pressure on politicians to take action. This public pressure requires the engagement of civil society organisations such as labour unions, professional associations, the private sector, and media (Sabharwal & Berman, 2016).

7.3 Legislative, Organisational, and Professional Requirements

In relation to fighting fraud and corruption, Jordan was among the first Middle Eastern countries to set up specialised agencies for this purpose. The Audit Bureau of Jordan is the main audit institution in the Kingdom (Business Anti-Corruption Portal, 2013). It was established under the Audit Bureau's Law for the year 1952, which was issued in accordance with the Jordanian Constitution. Article 119 of the 1952 constitution stipulates the Audit Bureau has been set up to audit the revenues and expenditures of the state (Jordan Audit Bureau, 2013). Five amendments to the Audit Bureau Law have been issued over the last 4 decades to keep pace with the regional and international changes in economies and politics, and the evolution continues in auditing methods and objectives (Jordan Audit Bureau, 2013).

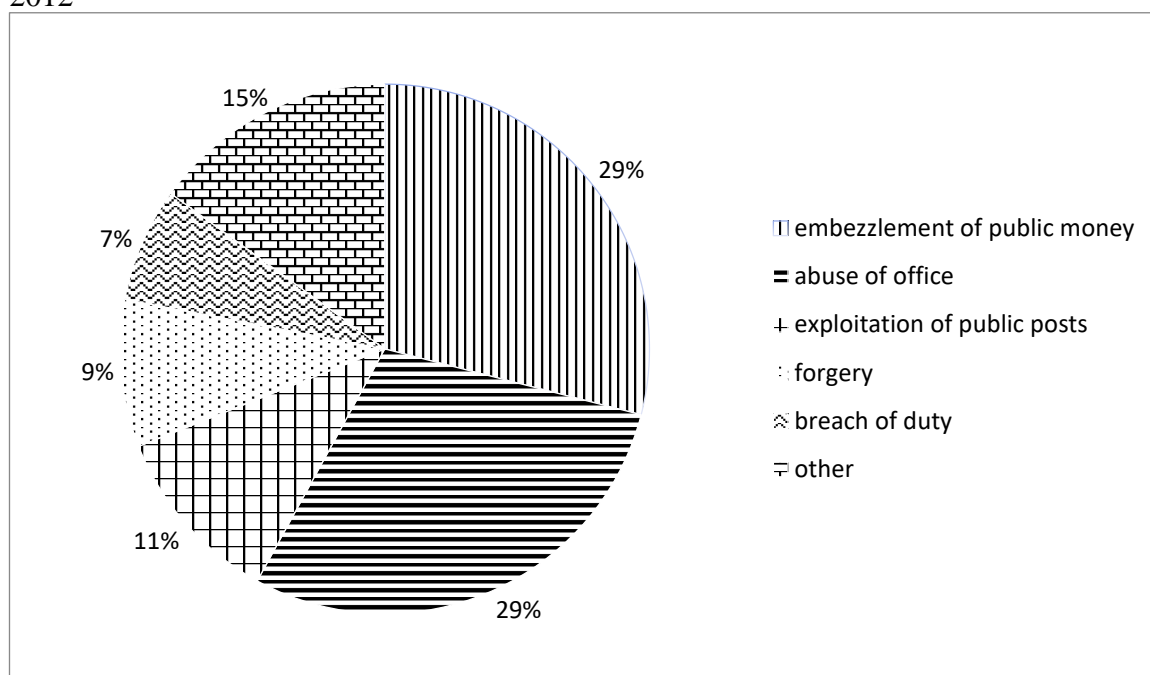
7.3.1 Enhancing the independence and accountability of oversight agencies.

As discussed earlier (see section 7.2), the economic and political developments in Jordan during the last decade (Sharp, 2013) were accompanied by a marked increase in fraud and corruption rates (Abu Azzam, 2016; Susser, 2013). Another two oversight agencies were, therefore, created between 2006 and 2009 to support the Audit Bureau. These agencies are the Jordan Anticorruption Commission (JACC) and the Ombudsman Bureau [*diwan al-matha'alim*] (Abu Azzam, 2016). According to the Anticorruption Commission Law (2006), the JACC must be administratively and financially independent and conduct its work free from

executive interference. Nevertheless, participants indicated a multitude of limitations and problems that significantly affect the effectiveness and reliability of oversight agencies in Jordan, mainly, the lack of independence and power to prosecute corruption. These criticisms are consistent with those of Global Integrity (2011) which reported that the oversight agencies in Jordan, in practice, are not entirely free from political interference. Oversight agencies' appointments and any important official decisions are occasionally based on political loyalties, nepotism, and the unofficial interference of the Public Security Department and the Intelligence Department (Global Integrity, 2011). This factor may constitute a real obstacle that prevent any group other than progovernment groups from participating in anticorruption associations (Abu Azzam, 2016).

The JACC has an independent budget which is subject to the oversight of the Audit Bureau (Jordan Audit Bureau, 2013). The JACC commences the necessary investigations of its own accord in order to follow up suspected corruption. It may also base its inquiries on information from whistleblowers. The JACC employs qualified staff to carry out the technical, financial, and managerial audit. In addition, during the investigation into any case, the JACC may entrust any of the companies or persons or specialised parties being investigated to provide the required support (Jordan Audit Bureau, 2013). A total 303 cases were handled by the investigation department of the JACC during 2012. Twenty-one of the cases delegated to the JACC were referred to the Prosecutor General; 132 cases are still under investigation; 139 cases were reserved citing lack of evidence; and, there were 11 cases in which the JACC addressed the authorities concerned and to instructed them to correct their irregularities. The JACC's 2012 Annual Report stated that the majority of the cases looked into by the JACC (around 60 per cent) focused on embezzlement of public money and the abuse of office. The remaining 40 per cent included other types of fraud and corruption such as exploitation of public posts and forgery (see Figure 7.3).

Figure 7.2: The percentages of the most prominent cases the JACC dealt with in 2012



Source: Adapted from Jordan Anticorruption Commission, 2012.

The Ombudsman Bureau [*diwan al-mathaalim*] in Jordan specialises in dealing with complaints against the Public Administration only (Jordan Ombudsman Bureau, 2011). The term public administration, according to the Ombudsman Bureau Law (2008), includes ministries, public departments, municipalities, official institutions, public institutions, and regulatory agencies that are entrusted with the regulation and supervision of public services in accordance with the relevant laws. According to the Ombudsman Bureau Law (2008), if the ‘public administration’ complained against fails to respond to the Bureau’s correspondences, or refuses to implement the Bureau’s final recommendations, the President of the Bureau may communicate the issue to the Prime Minister, in order that the necessary actions can be taken (Jordan Ombudsman Bureau, 2011). Nevertheless, in 40 per cent of cases there was either no response or there was a negative response, and the President of the Bureau did not communicate the issue to the Prime Minister; consequently, the cases remained unsolved (Jordan Ombudsman Bureau, 2011). Similar to the JACC, the Ombudsman Bureau is not fully protected from political interference, as the Ombudsman is nominated by the Prime Minister. Furthermore, many other institutions carry out the functions of the national ombudsman in Jordan, for instance, the Higher Council for Media, which acts as ombudsman for media issues,

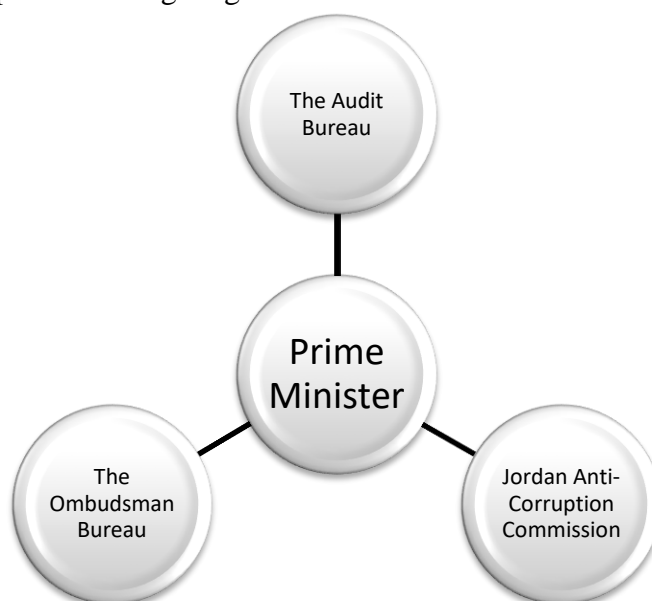
and the National Centre for Human Rights (NCHR). These overlapping functions and responsibilities have resulted in conflicting goals and coordination challenges.

In addition to the three main antifraud and corruption agencies in Jordan mentioned above, the General Intelligence Directorate (GID) also has an anticorruption office, known as the Anticorruption Directorate (Business Anti-Corruption Portal, 2013). However, the GID does not publish its reports, so its role is not clear to the public. Despite the GID's involvement in anticorruption efforts, the GID has itself been involved in numerous scandals. One of the latest and most prominent cases was the trial of the former Intelligence Chief Muhammed Dahabi, who was sentenced in 2012 to 13 years in prison for charges that included embezzling public funds and laundering money (El-Shamayleh, 2012). Another former intelligence chief and a high-profile figure in Jordan, Sameeh Batikhi, was sentenced in 2003 to 8 years in prison for forgery of state documents and abuse of office (Associated Press, 2012).

7.3.2 Solving the overlapping problems among oversight agencies.

As discussed above, the review of the websites and the reports and laws of the oversight agencies in Jordan show that they are vulnerable to political influences and have no power to prosecute corruption. In addition, this review revealed an overlap and intersection between the oversight agencies in Jordan in terms of duties and authorities. These observations are supported by several participants who criticised the existence of so many oversight agencies in a small country like Jordan and pointed to lack of independence, considerable duplication, overlap, and lack of coordination between oversight agencies. Figure 7.3 shows the major three oversight agencies in Jordan. A comparison of the major three oversight agencies in Jordan in regard to their objectives, scope of work, and duties and authorities is detailed in Appendix 11.

Figure 7.3: Major public oversight agencies in Jordan



Source: Author

The participants believed that the government would be able to achieve greater efficiency and effectiveness in its anticorruption programmes if it were to dispense with some oversight agencies or amalgamate the existing agencies to create fewer entities. One participant, Eisa, went further arguing that the establishment of a few of the oversight agencies in the last 2 decades involved corruption, a point illustrated below:

Also this is important: I mean here in Jordan we have several [government] agencies. And, in general, if you look at it, you will find that they all do the same Job. The Audit Bureau, for example, the Anticorruption Commission, the Office of the Ombudsman, the Companies Control Department, they all do the same job and each of them goes beyond the other's role. And, of course, *Allah wakeelak*²⁷, of course, this is a personal agenda to appoint so-and-so as a president of an authority, to appoint so-and-so as a general manager, and to appoint so-and-so as a president of a bureau. (Eisa)

The JACC and the Audit Bureau were contacted in December (2013) regarding the overlap and intersection among oversight agencies in Jordan. Both the JACC and the Audit Bureau acknowledged these observations and advised that a committee that includes members of the Audit Bureau, the JACC, the Ombudsman Institution,

²⁷ '*Allah wakeelak*' is a parenthetical phrase which can be translated literally to mean "Allah is He in whom you trust". It is used to emphasise the sincerity of the speaker.

and the NCHR had been established to study the issue. In April 2016, Integrity and Anticorruption Act number 13 of (2016) came into force and merged the JACC and the Ombudsman into one commission entitled the Jordan Integrity and Anticorruption Commission (JIACC), thus cancelling the Bureau of Ombudsman Law number 11 for the year 2008 and the Anticorruption Law number 62 for the year 2006. The government stated that this change aims mainly to reinforce the role of values and the code of conduct within the public sector and to unify national integrity and anticorruption efforts. The differences between the new and the cancelled laws are examined in chapter 9.

7.3.3 Stepping up the role of the JACPA in developing forensic accounting practice and education.

As the only professional body organising the accounting profession in Jordan, JACPA shares responsibility for the development of accounting and forensic accounting education. The JACPA (2015) objectives are

Taking care of the members' interests and preserving the profession traditions and honour; encouraging the research and continuing education in various profession fields; contributing in planning for the continuing program development to enhance the efficiency of practitioners in the profession; and cooperating and coordinating with the professional, educational, local, Arabic, and international institutions.

'Isolated from academic institutions', participants, however, believed that the JACPA contribute less effectively to the development of accounting practice and education in the country than it might. Participants also argued that the JACPA supports the maintaining of an artificial shortage of public accountants in the Jordanian market. The following excerpts illustrate that belief:

When it comes to the accountants, do you know what is our problem? We are just processing data. We are insulting our profession, underestimating it. There is no association [JACPA], no professional association, no minimum wage. The problem is that we undermined the profession (...). The JACPA caused it, made hard exams, so people will not be able to hold certificates. Those are the people who undermined the profession. (Eisa)

They are negligent; all what they do is bullying. They just understand money, nothing but money. The JACPA works here based on the bullying system. Neither their exams are right nor their work. (Khalil)

These arguments are supported by the extant literature (Abd Al-Jaleel & Thaher, 2015; Al-qatawneh, 2014). The JACPA has frequently been criticised for monopolising entry to the profession through imposing strict regulations and exacting exams. Al-qatawneh (2014) indicated that of the around 100,000 accountants in Jordan, only fewer than 600 hold the JCPA certificate, although there is an estimated demand for 6000 JCPAs. Similarly, Abd Al-Jaleel and Thaher (2015) indicated that the passing rate for the JCPA exam has always been low, hovering around 10 per cent. Abd Al-Jaleel and Thaher (2015) surveyed candidates taking the JCPA exam, which showed that the main obstacles to passing the exam are the wide scope of the exam, the lack of proper study materials, and the continuous changes to public accounting laws and regulations. Those interviewed also raised concerns about the comprehensiveness of the JCPA exam and its relevance to the Jordanian context. For example, Nassar, an accounting professor, explained:

There is a deficiency in the JCPA exam covering important topics related to our society. The day we had a conference, we told them that ethics is one of the subjects not covered. Ethics is an important part of the CMA, CPA and CIA. Our Jordanian exam does not talk about ethics. (Nassar)

This criticism of the Jordanian Association of Certified Public Accountants was reviewed with Ammar, a member of the Jordanian Association of Certified Public Accountants' board of directors. Ammar claimed that Jordanian universities are most to blame for the low pass rate in the JCPA exam. Ammar argued that universities must better prepare accounting graduates for the labour market by improving the relevance of the accounting curriculum.

You find when the accountant enters the labour market, it is as if he [sic] is hearing about atom physics: "What do you mean by accounting standards!" "What is the audit standards!" This creates a gap between the graduate and the labour market. (Ammar)

Ammar expressed an interest in forensic accounting, and described it as an "important topic". He also explained that the JCPA exam already includes a few

forensic-related topics such as the anticorruption law and the law on money laundering. Furthermore, Ammar remarked that the Jordanian Association of Certified Public Accountants is open to any suggestions that may improve the JCPA exam pass rate and relevance to the business world.

Developing forensic accounting practice and education in Jordan requires a commitment to and support for action that goes beyond academia to work collaboratively with government agencies and professional bodies. The interview data, however, indicated a widespread feeling among participants that the JACPA is failing to achieve its objectives to further the accounting profession, develop accounting education, and serve the interests of accountants in Jordan. The JACPA ought to play a key role in developing forensic accounting educating by taking the initiative to connect to academic institutions, government agencies, and industries to work in partnership to develop forensic accounting education and training programmes; promoting forensic accounting in their publications and activities; emphasising forensic accounting as a field of knowledge essential for practitioners, and specifically, in the JACPA exams; and, sponsoring research and development in forensic accounting.

7.4 Religious and Cultural Requirements

Different countries and cultures provide a context that causes fraud and corruption to spread in different forms (Ramamoorti, 2008). For example, an act like compact disc copying is considered to be unethical in most Western countries, while the same activity is a common practice in Jordan. Hence, an understanding of the different cultures' values may help to explain some differences in people's perceptions and behaviour (Ford, Nonis, & Hudson, 2005). Religious belief systems have multiple effects on the ethical attitudes of communities, including those related to fraud and corruption (Ray, Berman, Johnson-Cramer, & Van Buren, 2014). The following discussion focuses on the Islamic philosophy, because Islam plays a powerful political and socioeconomic role within Middle Eastern countries, including Jordan. As discussed in the theoretical framework, Islam, as the dominant religion in Jordan, plays a major role in people's lives. Both religion and culture go hand in hand to shape people's perceptions, attitudes, and behaviour (Hofstede,

1980). In this section, the potential influence of religion and culture on Jordanians' perception of forensic accounting education and practice is analysed from two angles: first, the relationship between culture and religion in Jordan and fraud and corruption and second, the relationship between culture and religion and regulations in Jordan.

7.4.1 Including the religious and cultural components in the teaching of ethics and forensic accounting.

Islam, as Othman and Yahya describe, is a complete religion that is meant to regulate all aspects of a Muslim's way of life (Chrisp, 1991). Islam regulates the man-to-God relationship through the Islamic rules on ritual worship [*ibadah*], and regulates the man-to-man relationship through the Islamic rules on daily life transactions [*muamalat*] (Rayan, 2012). This view is consistent with the philosophy of *khilafah* in Islam (see sections 3.3 and 3.4), which provides a comprehensive ideological perspective for the Islamic view of life (Khan & Sheikh, 2012). From this perspective, human beings are God's vicegerents on earth, and all resources have been given to them in trust [*amanah*] (Osman, 2003). The duty of mankind as trustee is to use wisely the resources available to it and develop and invest those resources for the benefit of all creatures (Hassan & Lewis, 2014). On the basis of this general philosophy, Islam prohibits all practices that may cause harm, either to specific stakeholders or the community as a whole, and considers harmful acts to be forms of corruption [*facad*]. For example, Islam considers interest [*riba*] to be a source of inequalities and exploitation and, thus, links it with corruption (Bhala, Yeh, & Bhala, 2016). The strong warning in the Qur'an against charging interest perhaps best exemplifies Islam's intention to protect the interests of the community. In the Qur'an (2, 278-279), God says

O you who have believed, fear God and give up what remains [due to you] of interest, if you should be believers. And if you do not, then be informed of a war [against you] from God and His Messenger. But if you repent, you may have your capital sums? [thus] you do no wrong [to others], nor are you wronged.

Williams and Zinkin (2006, p. 6) (internal citations deleted) explain that

interest or usury is prohibited in Islam not because the religion does not see it as a way to turn excess capital into profit but because of a deeper concern for the moral, social, and economic well-being of society, since it creates profit without work and it does not share the risk between the lender and borrower. There is also another perspective, namely that Islam chooses to create a different basis for an economic society, which prefers an equity-based, risk-sharing, and stake-taking economic system to a debt-based system.

The participants in this study agreed that fighting corruption (*facad*) and fraud [*ghush/ihtyal*] is an integral part of the teachings of the Qur'an and Sunnah. However, the participants explained that rather than perceiving Islam as a complete code of life, the majority of Muslims, including Muslims in Jordan, consider Islam to be about rituals only (Al-Qaradawi, 1999; McCloud, Hibbard, & Saud, 2013). Therefore, many Muslims do not follow the Islamic rules on transactions [*muamalat*] which involve the rules regarding the social, political, and economic interactions among humans. Othman's comment below illustrates this point:

In the first place, we have an awareness crisis, because Islam is linked to worship rituals more than it is linked to interactions among people... So you could be someone who has completely memorised the Qur'an, practising the rituals, submissive in your life; nevertheless, you accept the political despotism in your country or in another country. This is a result of undermining the meaning and receiving, kind of, the simplest image of the religion, or rather, receiving a distorted image of the required religion. This results in making Muslims with no values, because values become accessories in religion, but worship rituals are the most important. So it is very common that a person may go on a pilgrimage [*hajj*] but pay a bribe to get the ticket, or pay the obligatory alms [*zakah*], but deprive his family of their financial rights (Othman).

Othman also explained that, although Islam had rejected the pre-Islamic age's cultural customs of "ignorance of divine guidance" [*jahiliyya*] some *jahiliyya* social norms (Al-Qaradawi, 1999) still persist in Muslim Arab culture today. Othman portrayed Arabs in *jahiliyya* as a society that "suffers from a social crisis" (Al-Qaradawi, 1999). In explanation, Othman went on to say that social and moral ills such as oppression and injustice were rampant in *jahiliyya*, and that Arabs acknowledged and tolerated such "deviations".

Surely, you are talking about Arab tribes; their culture and history is undoubtedly based on injustice. Maybe based on the idea that ‘the weak are meat the strong do eat.’ The idea that the murderer is not to be held accountable, but tribes together arrange *atwa*, ‘truce’, and things like that. Therefore, the social culture plays a significant role. (Othman).

Similarly, Waseem argued that some corrupt practices in Jordan have their roots in Arab culture. For example, according to Waseem, “*wasta* (patronage) and *atwa*²⁸ (temporary truce) have a long and generally respectable history in Arab culture as ways of managing relations and solving issues between individuals or tribes through intermediators”. He explained that the high value placed on tribe or family loyalty in Arab and Jordanian culture leads to providing favours and preferential treatment to friends or relatives. This argument is in line with the discussion in sections 2.3 and 4.5 which suggests a positive relationship between collectivism and corruption in Jordan. In Jordan, being characterised by collectivism, people by nature are integrated into strong cohesive groups, and families are often extended with uncles, aunts, and grandparents. The group protects them in exchange for unquestioning loyalty. Getz and Volkema (2001) argue that the influence of collectivism on the level of corruption varies depending on the economic situation in a country. According to Getz and Volkema (2001), under adverse economic conditions, “a collective movement toward illegal transactions is tolerated on the basis of attribution theory (that is, others are doing it)²⁹” (p. 16). In addition, the orientation toward developing and maintaining networks of relationships increases trying to facilitate illegal transactions such as bribery and nepotism. Hence, under the adverse economic conditions in Jordan (see section 2.4), it is more likely that collectivism is associated with higher levels of corruption.

Moreover, Othman, among other participants, perceived the concepts of honour, reputation, and status as social norms that have a negative impact on the shaping of behaviours and attitudes around corruption in Jordan. This argument is in line with

²⁸ When a major crime is committed in Jordanian tribes, *atwa* or *jaha* is usually the first practice. In *atwa*, a group of respected elders would be called upon to resolve and contain the issue through negotiation and compromise while salvaging the honour of the parties involved (Al-Ramahi, 2009).

²⁹ “Attribution theory says that an individual will not be held responsible for his or her actions if the individual behaves differently in other situations (distinctiveness) and if others behave similarly under these same conditions (consensus). Under these circumstances, society attributes such actions to external rather than internal causes. Thus, a (person) may be more likely to accept or demand a bribe as a survival strategy” (Getz & Volkema, 2001, p. 12).

discussion in section 2.3 and supported by Menipaz and Menipaz (2011) who note that the great focus on reputation, status, and ultimate achievement rather than on legitimacy in high masculine cultures, such as the Jordanian culture (Alkailani et al., 2012), would justify the means by which the end is achieved, even if the means involve acts of corruption. Nevertheless, Othman added that the culture of Jordan should not be perceived as a culture that tolerated corruption. He suggested that the seeds of corruption can be found in every society. However, the increasing appearance of corruption could be a sign of an unhealthy political, religious, and economic environment.

When there is a corrupt political environment, when there is a wretched religious discourse, when we have a poor economy, it is natural that the Bedouin inside us (of course the 'Bedouin' here means an irresponsible human, or the retarded element inside humans or social ills) will spread at this stage. However, when there is a treatment, these things will be repressed. (Othman)

Furthermore, Yahya put forward another point: "It is not as simple as to say the culture in Jordan tolerates or denies corruption, as different values will be found in the same country, in the same society, and even in the same family". However, Yahya did emphasise the positive influence of culture and social norms in Jordan in building a close-knit community. Yahya also pointed to the concept of honour (Zakaria, Stanton, & Sarkar-Barney, 2003) as a primary factor that promotes integrity and healthy social interactions in the Jordanian society (see sections 2.3 and 4.5), as the following comment shows:

In the Jordanian culture, wherever you go you represent your family and tribe. So a person will avoid criminal involvement or any other unacceptable behaviour in order to avoid shame against those loyalties. Honour will be protected and defended at all costs. He will say: The reputation of my family [is what matters]. Even if I were going to die of starvation, I would not be ready to risk the reputation of my family and myself. (Yahya)

The findings indicate that Islamic traditions and Jordanian cultural norms might provide a normative framework for integrity and combating corruption. These findings are in line with the extant literature (Abuznaid, 2009; Al-Qaradawi, 1999; Ramady, 2015; Rice, 1999; Zinkin & Williams, 2006). However, the participants

made it clear that regulatory, political, and economic factors have an important role to play in determining the actual form of the relationship between Islam and fraud and corruption. Hence, as discussed in sections 7.2 and 7.3, major changes in existing policies, regulations, and legislative changes are required in Jordan to empower forensic accountants to carry out their functions effectively.

Furthermore, a distorted perception of Islam may disrupt its intended role in promoting ethics (Al-Qaradawi, 1999). This idea implies that incorporating religious and ethical topics into the accounting and forensic accounting curricula has the potential to promote a better understanding of Islam and, thus, encourage ethical behaviour. This possibility will be discussed further in section 8.3.1. In addition, this study finds that a gap may exist between the ideal model portrayed in scriptures and practice. This finding is in line with Rice (1999), who suggests that in each particular culture there is a difference between people's aspirational ethics, i.e., that sought by education, and their everyday practices. Similarly, Gibson (2010) argues that in all cultures and religious traditions one can find the universally accepted rule (the golden rule). For example, in the words of Jesus (PBUH) we find: "So in everything, do to others what you would have them do to you, for this sums up the Law and the Prophets" (Matthew 7:12). Although this idea is present in many of the world's major religions such as Judaism, Christianity, and Islam, often, however, the ethical dilemmas a person must face do not have clear answers, and this lack of clarity is what leads to a model-practice gap (Gibson, 2010). Forensic accounting education has the potential to contribute to bridging this gap by raising future graduates' ability to make ethical decisions.

7.4.2 Considering the dominant beliefs and cultural norms when shaping policies, laws, and regulations.

Those who participated in this study argued that the interplay of culture and corruption is determined to a large extent by the efficacy of anticorruption policies and practices. The participants emphasised the point that regulations and laws and forensic accounting techniques and measures cannot simply be adopted, but must be, first, adapted (Gibson, 2010) to the Jordanian context. The participants critiqued the existing exclusive secular patterns of regulations and laws in Jordan, arguing

that drawing heavily from the Western secular system creates conflict between citizens and the state. On the one hand, Islam, as the majority religion, has long been a reference through which the society identifies people's rights and duties and what is prohibited and permitted (see section 2.3). On the other hand, those in positions of authority tend to impose and practise secular regulations and policies (Gasiorowski, 2016). Hence, the participants perceived a tension which is deeply rooted in the nature of the relationship between religion and regulations in Jordan. The following statement made by Murad, an Imam and an Islamic law researcher, demonstrates this point:

There is a clear conflict between the state laws and regulations and the Islamic principles regarding several issues such as *riba* (usury) or what they call 'interest' and allowing it, although it is strictly prohibited by Islam. So in view of the reality of the state, if they [the state] really want their [anticorruption] efforts to succeed, it should not, it should not counter the public mood, and not to counter the society, and not to counter the culture. (Murad)

Such a tension between religion and regulations in Jordan is also evident in the taxation system, as several participants stated. Malik explained that Muslims have a religious and moral duty to pay *zakah* for the support of the poor and for the legitimate functions of the government. Thus, according to Islam, evading one's obligation to pay *zakah* is classified as a major sin and immoral act. However, the government does not administer and collect *zakah*, as ordered in Islamic law, and prioritise taxation over it. Hence, as Malik explained:

Taxation places the Muslim in a quandary because the state would still view citizens paying *zakah* as tax evaders as long as they do not pay tax. It seems like *zakah* has no value to the state. While, from an Islamic point of view, according to many theologians, *zakah* is the only tax that an Islamic state can levy upon its Muslim citizens. (Malik)

Similarly, Tameem mentioned that Prophet Muhammad (PBUH) had reportedly said, "He who levies extra-tax/tribute [*maks*] shall not enter Paradise" (Abu Dawud, Vol. 3, p. 349). Tameem explained that the imposition of any extra-tax/tribute [*maks*], except when made under specific circumstances identified by Islamic law, constitutes an illegitimate source of revenue. Hence, Tameem asserted that there is

neither a moral nor a religious obligation for a Muslim to comply with a law that contradicts the Islamic rules.

Furthermore, several participants stressed the importance of understanding the view of women in Jordanian culture in order to develop successful, and acceptable, anticorruption policies and forensic accounting education and practices. As discussed in section 2.3, the interaction between males and females in Jordan is restricted by certain social norms and Islamic rules. Conventional forensic accounting practices may contain elements that contradict domestic social norms and Islamic rules. However, such potential contradictions could be addressed through efforts to adapt conventional forensic accounting practices to meet social norms and Islamic-compliant practices. Malik clarified this point when he said that:

You can apply the international standards in Islamic concepts. For example, a female can interrogate another female. Why should it be a male? Why can we not have qualified female staff who can interrogate females, and who even may understand other females better.... Even regarding *kholwa*, it has rules. Take, for example, a glass room. It is not considered as a complete *kholwa* if it was muffled insulated glass room and the door was unlocked. This is not considered as *kholwa*. I mean we should not counter everything; we should adjust things to the Islamic rules. (Malik)

Isam, among others, explains that an efficient anticorruption policy and forensic accounting practices should not conflict with the existing/prevaling culture and social norms. Isam particularly noted the concept of *kholwa* (seclusion) as an example. *Kholwa* stipulates that a man and a woman who are *mahram* (unmarriageable kin) should not be alone in an enclosed area in such a way that a third party cannot easily come upon them (Al-Qaradawi, 1999). His comment below illustrates this point:

Logically, I don't think there is any kind of culture or customs or traditions that denies your knowing about a specific field or area, but what they may be sensitive to is the treatment, the procedures, the steps. As an example, you can conduct an administrative investigation in Europe with a woman without any other people in the room, while maybe it is not acceptable in Saudi Arabia or in the Gulf or even in Jordan. Now in these cases, you can, as an investigator, deal with this

[situation] by get either another female or another male colleague to attend the investigation with you. (Isam)

The concept of *kholwa*, other social norms, and Islamic rules and positions regarding interaction between males and females should be considered by forensic accountants. Murad, for example, highlighted that it is extremely important to understand that concepts of honour, dignity or decency become more sensitive and crucial when it comes to women in Arab and Jordanian culture. This argument is supported by the literature review (see section 4.5). Murad explained that, for Arabs and Jordanians, women are weak and in need of adult men protection. Therefore, if a woman loses her honour, this loss will affect the honour, in a wider sense, of her family or tribe. As Murad put it:

The issue of accusations against women in our society is actually still a sensitive issue, still a sensitive issue. Therefore, there should be a combination of evidence, and that evidence should be stronger than if the accusation were made against a guy. Because if a guy has been accused or interrogated and then his innocence has been proved, this is normal and the society accepts it. However, just questioning a girl still has a special kind of sensitivity. (Murad)

Thus, forensic accounting practices should be adapted and provided using a suitable procedure for the Jordanian context. This finding is in line with Gibson (2010) who noted that, due to cultural differences, the solution to the accounting practice and education issues in some countries and the way in which that solution is delivered may need to be completely different to that which usually occurs in others (Engelmann, 1962; Baydoun & Willett, 1995). Gibson (2010) mentions the following incident as an example of cultural influence on the accounting system. A multinational company which has a branch in Singapore discovered that one of its Asian staff there had used company funds for personal expenditure (Gibson, 2010). Since most of the managers in the company were from Western cultures, their idea was to use the situation as an example to lead others to see the consequences of committing fraud; however, the fact that the culture in Singapore demands that one does not lose face or be publicly embarrassed made them reconsider and they chose rather to dismiss the employee quietly (Gibson, 2010) (see section 4.5 for a discussion on the culture of ‘saving face’ in Jordan).

7.5 Summary

Trust between the state and the people has been significantly damaged due to the lack of transparency, rule of law, and judicial integrity and capacity. The clearing of prime ministers, ministers, MPs, intelligence officers, and other government officials of major corruption charges in the last decade has raised doubts about the government's 'intention' to fight fraud and corruption. Fighting fraud and corruption should not be limited to the establishment of oversight agencies, the creation of anticorruption initiatives, and the development of forensic accounting practices. However, fundamental political and economic reforms ought to be at the heart of the integrity and anticorruption agenda. The primary goal of these reforms should be to reduce the underlying incentives to engage in corrupt acts and fraud through advancing transparency, accountability, and the rule of law. These three governance pillars are essential to pave the way for effective implementation of anticorruption instruments and initiatives and forensic accounting practices. Anticorruption initiatives and forensic accounting education and services are needed, but they will yield only little long-term impact if reforms do not reduce the basic conditions that encourage unethical behaviour.

Despite the establishment of several anticorruption reforms, initiatives, and agencies in the last decade, more needs to be done to coordinate the efforts and enhance the performance of oversight agencies in Jordan. The relationship between the oversight agencies in Jordan is supposed to be a complementary, cooperative relationship (Jordan Anticorruption Commission & Jordan Audit Bureau, personal communication, December 2013). However, in practice, there is considerable overlap and intersection among these agencies in terms of the scope of their work, duties, and authorities (see Appendix 11 for a comparison of the major oversight agencies in Jordan). Moreover, oversight agencies in Jordan lack independence and the authority to prosecute. The issuance of Act 13 of (2016) was a positive step (for further details see section 9.3.2). However, Jordan still has a long way to go. Political and regulatory reforms are needed to empower civil society to hold government and oversight agencies accountable. Having independent, transparent, and accountable oversight agencies empowered by competent forensic accountants

constitutes best practice in combating fraud and corruption. This regime presupposes an independent judiciary.

The focus of the discussion with participants on Islamic values and requirements arose from the fact that the majority of Jordanians are Muslim. That religion, therefore, exerts a degree of Islamic influence on the whole of Jordanian society. The Islamic heritage has a rich tradition of high moral standards and ethics that should, theoretically, have a positive impact on and give legitimacy to anticorruption initiatives in Jordan. However, the participants believed that it is hard to disentangle the overall impact of religion on the level of corruption in Jordan from the wider context and primarily from the political and economic factors. The participants also highlighted various aspects of Jordanian culture that seem to be compatible with corruption; however, they were quick to qualify that point by saying that it did not mean that Jordan has a culture of corruption. Indeed, the participants mentioned a number of aspects of Jordanian culture that seem, on the contrary, to be negatively associated with higher corruption (or positively associated with anticorruption). The overall balance of the positive and negative impact of religion and culture on the level of corruption in Jordan varies enormously across situations, among groups and individuals, and over time.

As Islam in Jordan constitutes the country's dominant domestic values, participants argued that it is also natural to expect that Islamic values find their expression in the economic policy of the state. They maintained that an exclusively secular legal, regulatory system is not the best option in Jordan. The interviewees claimed that the invocation of Islamic rules in forming and imposing an Islamic-friendly taxation system, for example, would provide the state with a kind of legitimacy and would provide Jordanians with a divine purpose for performing their taxation duties. Thus, the participants argued that taking Islamic rules into consideration when drafting regulations and laws will promote harmony and good citizenship in Jordan. Finally, participants stressed that when providing and adapting forensic accounting practices consideration should be given to the concepts of honour, reputation, and status as social norms in Jordan.

The next chapter deals with the third and final research question.

Chapter 8

Findings on Research Question 3: A Forensic Accounting Education Framework

8.1 Introduction

Building on the previous two chapters that explored the incentives, barriers, and particular requirements in relation to forensic accounting practice and education in Jordan, the current chapter addresses the third research question: What should the framework for a forensic accounting programme in Jordan be? This chapter specifically aims to identify the competencies that forensic accountants in Jordan require and to outline the objectives and design of the forensic accounting education framework developed in this research.

Based on Taba's (1962) model of curriculum development, which emphasises that the consideration of the needs of stakeholders and the context in which the curriculum is developed as the basis of the curriculum design (see sections 3.2.2 and 5.5 for details), this chapter analyses the following five areas: the interviewees' perceptions regarding the level of offering and the major objectives of forensic accounting education; the organisation and the scope of content and teaching strategies; and, the assessment methods for a forensic accounting programme. Finally, the interviewees' suggestions on the development of the curriculum and the preparation of faculty members who teach forensic accounting are analysed. An overview of the learning outcomes and the implementation and development strategies of the forensic accounting education framework developed in this research is provided in Table 8.1 and discussed in the subsections that follow.

Table 8.1. An overview the learning outcomes and design of the forensic accounting framework

Learning outcomes and level of offering - Section 8.2
<p>Level One — Familiarity: Topics incorporated in current offerings or in a single, distinct course Learning outcomes include: Define forensic accounting and describe the differences between it and auditing. Describe the fraud triangle (elements of fraud: pressure, opportunity, and rationalisation).</p> <p>Level Two — Comprehension: Multiple courses/ Minor Learning outcomes include: Explain the major types of fraud schemes and their implications. Describe the role of corporate governance mechanisms in fraud examination.</p> <p>Level Three — Generalist Practice: Stand-alone undergraduate programme Learning outcomes include: Apply the use of the various strategies and techniques used in fraud examination. Communicate findings in written and oral form suitable for a court of law.</p> <p>Level Four — Specialist Practice: Stand-alone postgraduate programme or nondegree course/s (certificate) Learning outcomes equivalent to ones existing in levels one and two, in addition to selected learning outcomes from level three to set focus on a particular career path.</p>
Content selection and organisation - Section 8.3
<p>1. Prerequisite knowledge and skills, include: Accounting principles and corporate and criminal law principles. Financial report reading and journal entry preparation and posting.</p> <p>2. Fraud examination, include: Fundamentals of fraud and fraud and corruption types and implications and the gathering and analysis of documentary and physical evidence. Logical reasoning and problem-solving.</p> <p>3. Forensic accounting in the digital environment, include: Fundamentals of fraud and fraud and corruption types and implications and the gathering and analysis of documentary and physical evidence. Logical reasoning and problem-solving.</p> <p>4. Forensic accounting in the digital environment, include: Cybercrime and cyber security and technology-based fraud solutions. Information technology capabilities and the gathering and analysis of digital evidence.</p> <p>5. Ethics, include: Islamic culture and ethics and key Islamic rules on transactions such as <i>riba</i> (usury), <i>zakah</i> (obligatory alms) and <i>facad</i> (corruption). Compliance and gender-sensitive communication skills.</p> <p>6. Litigation support and advisory services, include: Litigation support techniques and expert testimony techniques. Dispute resolution and presentation skills.</p>
Instructional Strategies and learning resources - Section 8.4
<p>Instructional strategies include: Class discussion, case studies, story-telling, writing exercises, lecture-demonstration by instructor(s) from another special field (guest speaker), individual or class projects, presentations by learners, the use of technology such as music, movies, documentaries, and social media, and reading assignments involving journals, monographs, reports, or textbooks.</p> <p>Learning resources include: Textbooks, case studies, professional reports and websites, and the relevant Jordanian laws and regulations</p>
Assessment strategies and practices - Section 8.5
<p>Performance-based assessments (e.g., participation in an oral examination or demonstration of proficiency in using software, a technique or a set of skills in simulated or real-world situations), case studies, quizzes, course assignments, essays, projects, and presentations.</p>
Curriculum development strategies - Section 8.6
<p>The instructor as a chief vehicle for organising and administering the work of curriculum development with the interested parties.</p> <p>Practitioners/professional bodies/oversight agencies in the funding, the promotion, the development and the implementation of the forensic accounting curriculum</p> <p>Education providers to maintain the motivation and commitment needed to assure productivity</p>

Source: Author

8.2 Learning Outcomes and Level of Offering

The participants' responses revealed that they perceive forensic accounting education as a hierarchical structure. This hierarchical structure encompasses different levels of learning, namely the familiarity level; the comprehension level; the generalist practice level; and, the specialist practice level. As detailed in Table 8.2 below, each level involves different types of requirements and different levels of offering, and each produces different learning outcomes. These findings on learning outcomes and level of offering are consistent with those found for the first research question on the incentives and opportunities for forensic accounting education (see section 6.3). Incentives and anticipated advantages for forensic accounting education ranged from building familiarity with forensic accounting among graduates to providing the market with both entry-level and specialist forensic accounting practitioners.

Table 8.2. The different levels of complexity, levels of offering, and general learning outcomes of forensic accounting education

Level of complexity	Level of offering	General learning outcomes/ Learners will be able to
Level One — Familiarity	Topics incorporated in current offerings or in a single, distinct course	Define forensic accounting and describe the differences between it and auditing. Explain the general role and functions of forensic accounting. Define fraud and corruption. Describe the fraud triangle (elements of fraud: pressure, opportunity, and rationalisation). Explain the common types of fraud and corruption schemes and their implications. Explain some of the major strategies and techniques used in fraud examination.
Level Two — Comprehension	Multiple courses/ Minor	Explain basic and advanced concepts of fraud examination. Explain the major types of fraud schemes and their implications. Identify and analyse ethical issues and potentially fraudulent situations. Explain the major strategies and techniques in fraud examination. Describe the role of corporate governance mechanisms in fraud examination. Explain how to obtain and analyse evidence and how it can be used in court.

Level Three — Generalist Practice	Stand-alone undergraduate programme	<p>Evaluate the various types of fraud and corruption schemes and their implications, including cyber fraud, tax fraud, and identity fraud.</p> <p>Apply the use of the various strategies and techniques used in fraud examination, including analytical procedures and inquiry, and interrogation methods.</p> <p>Apply the use of computer software and Internet in fraud examination.</p> <p>Apply knowledge of criminal and commercial law and regulations to engage in litigation support consulting and in expert witnessing.</p> <p>Apply knowledge of behavioural sciences and criminology in the context of fraud examination.</p> <p>Evaluate the impact of the religious, cultural, legal, and business environment on perpetrators and organisations and apply critical thinking and problem-solving skills within a professional context.</p> <p>Apply professional standards and ethical principles in decision making in the context of fraud examination.</p> <p>Critique the role of the major oversight agencies in Jordan in fighting fraud and corruption.</p> <p>Communicate findings in written and oral form suitable for a court of law.</p>
Level Four — Specialist Practice	Stand-alone postgraduate programme or nondegree course/s (certificate)	Learning outcomes equivalent to ones existing in levels one and two, in addition to selected learning outcomes from level three to set focus on a particular career path.

Source: Author

It is important to note that, although Table 8.2 states the learning outcomes for each of the four learning levels, those outcomes are not the focus of this section. Rather, it focuses on the interviewees' perceptions on the gradual offering of forensic accounting education and outlines the general learning outcomes at each learning level. The participants' perceptions on the specific learning outcomes of forensic accounting education, including the knowledge (concepts, ideas, interpretations, and applications) and technical and soft skills that forensic accountants in Jordan should possess will be covered in section 8.3.

8.2.1 The familiarity level.

Level one, the familiarity level, raises awareness of forensic accounting, which is a relatively new research topic (see section 6.2), through incorporating coverage of it in current offerings or offering a single, distinct course. Building familiarity with, and promoting the value of, forensic accounting education and practice has been emphasised in the theoretical framework (see sections 3.3 and 3.4) and in the first

findings chapter (see sections 6.2 and 6.4) as a prerequisite for introducing forensic accounting in Jordan. According to the participants, the function of offering forensic accounting education at such a general level is to provide both instructors and learners with exposure to the basic concepts of fraud and corruption and the general role of forensic accounting, yet, within the limited academic capabilities and curriculum change possible at Jordanian universities (see section 6.4), as the comments below demonstrate:

So, I think at some level we can say step number one is educating people that there are no forensic accountant specialists. So, within the programme itself you can have one maybe two maximum courses that deal with forensic accounting; maybe one at the undergraduate level, maybe very basic, and maybe one that is more advanced at the postgraduate level. So at least you have raised awareness within the academic community what this is about. Now, once this idea picks up and I think people become more excited, maybe some postgraduate or doctoral students may become more interested to research this. I think you can maybe take it apart a little bit and separate it, just as much as auditing has taken its own course, its own way a little bit away from accounting. (Adam)

I think the forensic accounting subject should be introduced and preached in a better way. Because I think for us in the Muslim Arab countries, and in the third world countries in general, this knowledge has not reached advanced levels yet.... So maybe let's say we put forensic accounting somewhere within the components of the traditional accounting [curriculum] that we're, let's say, familiar with at the university. I mean we have cost accounting, financial accounting, government accounting, and taxation accounting, let's have forensic accounting as well as one of the sections or the categories of accounting in general. (Faris)

Furthermore, this study emphasises that the efforts to develop familiarity with forensic accounting should not be limited to the familiarity level, but rather, learning about it should be a continuous process and should go beyond academia. This finding is consistent with earlier discussion in sections 6.4 and 7.3, where participants highlighted the significance of working collaboratively with government agencies, professional bodies, and civil society to raise awareness of forensic accounting. Participants believe that such a collaborative network of forensic accounting education stakeholders would not only raise awareness of forensic accounting, but would promote academia-industry partnership for

developing and implementing forensic accounting education and research (Alkubaisi, 2016; Etzkowitz, Webster, Gebhardt, & Terra, 2000). Hamza, for example in the following comment, highlights the importance of developing familiarity with forensic accounting among a wide range of stakeholders in the public and private sectors:

This topic [forensic accounting] should not be limited to the level of the raising of awareness within academia, or academic knowledge, or practical and scientific knowledge for those who work in this field. For the next step, it is important that the organisations, the audit firms that may provide forensic accounting services, all the stakeholders, either the judiciary, the business owners who may need to examine their [control] systems, the oversight agencies, any stakeholder, even the owners of private companies, are familiar with it [forensic accounting].
(Hamza)

Moreover, on the basis of the experience and feedback from teaching forensic accounting at the familiarity level, instructors are expected to be able to develop their general forensic accounting teaching ability and prepare plans, materials, and activities to offer forensic accounting education at higher levels. This finding is in line with Buckhaults and Fisher (2011, p. 31) who explain that “by becoming more familiar with course material and incorporating new methods for teaching accounting, accounting educators can reduce anxiety for themselves and their students thereby increasing student learning”. Hence, teaching forensic accounting at this level may be seen as an initial first step towards addressing the shortage of qualified academics.

8.2.2 The comprehension level.

By offering multiple undergraduate forensic accounting courses, which could constitute an undergraduate minor in forensic accounting, instructors can progress to level two, the comprehension level. Learners at the comprehension level are not expected to achieve the requisite knowledge and skills to attain entry-level forensic accountants’ competencies. However, the overall objective of teaching forensic accounting at this level is to provide learners with exposure to the forensic accounting knowledge and skills that accounting graduates, including those choosing nonforensic accounting career paths, need in order to meet the market’s

higher standards in terms of their ability to deal with fraudulent activities and ethical issues (Seda & Kramer, 2014; Smith & Crumbley, 2009) (see section 6.3 for a related discussion). The learning outcomes at this level envisage that learners will be able to demonstrate understanding of the basic, as well as some advanced, concepts of fraud; the major types of fraud schemes and their implications; and, the major strategies and techniques for fraud examination³⁰. This knowledge is, in turn, expected to enable learners to identify, analyse, and respond to a range of ethical issues and potentially fraudulent situations (Drumwright et al., 2015), as Hana suggests in the following extract:

I think at this stage we offer two or three forensic accounting courses within the accounting curriculum. Why? Like I said earlier, even if students are not planning to become forensic accountants, it is still important to provide them with exposure to fraud and forensic accounting topics. Why? Again, auditors, either internal or external auditors, CFOs and even accountants are dealing with an increasingly complex business world, and in order to prepare them to deal with this, they need to have good knowledge on what is ‘fraud’, why it is serious, what are the common types of fraud and corruption, specifically in Jordan, and how forensic accounting tools can be used to improve our performance. The other thing, it is very important for graduates to have good understanding of the importance of behaving ethically and the consequences of fraud and corruption, and when we talk about the consequences we talk about the legal, economic, and social consequences of fraud and corruption. (Hana)

Several Jordanian universities give accounting students the option of pursuing a minor in a related field such as finance, insurance and risk management, and computer science. Yarmouk University, for example, allows accounting students to earn a minor within any business subject area by completing 21 credit hours (see section 2.4 for details about the academic credit system in Jordan) in that subject area (see Appendix 4 for the accounting syllabus at Yarmouk University), and the Hashemite University offers a degree in accounting and commercial law. A minor can help accounting students to emerge well-rounded and to “stand out” in the job market, as Ammar explains:

³⁰ “Whether to use the term “fraud investigation” or “fraud examination” is a matter of debate among practitioners. Some, including the Association of Certified Fraud Examiners, prefer the term fraud examination because it encompasses prevention, deterrence, detection, and remediation elements in addition to investigation. Others prefer fraud investigation because the term examination has a special meaning for auditors and accountants” (West Virginia University, 2007, p. 7).

If we integrate it [forensic accounting] as courses I think this shouldn't be a problem As I know, some universities such as the Hashemite university, added commercial law [to the accounting programme], and for the insurance thing [programme] they added actuarial accounting. Many universities in general do this (...). What they do is that they do not start a new major, like I am graduating as a forensic accountant, no, but he will be an accountant and a forensic accountant. Just like accounting and law or commercial accounting. Here, whoever goes for it [studying forensic accounting] will be doing this to stand out from the crowd; especially that we have a great number of accountants in Jordan. (Ammar)

As asking academics to include [an] additional course/s to cover forensic accounting in already crowded accounting curriculum might be difficult and impractical (see section 6.4.1), this study finds that a minor in forensic accounting is a possible and favourable alternative of teaching forensic accounting at Jordanian universities. This finding is supported by Manuel, Shooshtari, Fleming, and Wallwork (2001).

8.2.3 The generalist practice level.

Level three, the generalist practice level, involves offering a stand-alone bachelor's degree in forensic accounting. Rather than focusing on the specific requirements of any single career path, consideration would be given to the general requirements of all potential employers and to all forensic accounting career paths when developing an undergraduate stand-alone forensic accounting programme. For that reason, graduates are not expected to be able to step right onto a specific career path, as that often requires specialised training or education and/or related job experience (West Virginia University, 2007). However, learners studying this programme are expected to acquire the specialist knowledge and skills required to enter the forensic accounting job market as entry-level generalists.

Building upon the learning outcomes stated for levels one and two, which would be covered at the early stage of the programme, learners at the generalist practice level are expected to gain a wider and deeper picture of forensic accounting topics by examining a few subjects further and exploring new subjects. For example, learners

would progress from ‘explaining the major types’ of fraud schemes and their implications to being able to ‘evaluate the various types’ of fraud and corruption schemes and their implications, including cyber fraud, tax fraud, and identity fraud. Examples of the new topics that learners would cover at the generalist practice level are: the use of computer software and the Internet in fraud examination; the application of behavioural sciences, including criminology, psychology, sociology, and anthropology, in the context of fraud examination; and, the application of knowledge of criminal and civil law and regulations in litigation support consulting and expert witnessing. Furthermore, learners at the generalist practice level would cover topics that study forensic accounting and fraud and corruption in the context of Jordan.

Resting their arguments on two different grounds, several participants, and academics specifically, seemed less enthusiastic about offering forensic accounting education at this level compared to the level one, two, and four options. This finding is in line with Davis et al.’s (2010) study that reported academics preferred having the forensic accounting curriculum either at the postgraduate level or as a component of an existing accounting undergraduate programme. On the one hand, a few participants perceived forensic accounting as a specialist field of knowledge and professional practice that should be offered at either the postgraduate level or as a professional training course. Those participants questioned the ability of undergraduate students to grasp ‘advanced’ forensic accounting topics without a solid base of knowledge in accounting, auditing, and business. Support for this argument can be found in the extant literature (e.g., Davis et al., 2010; Rezaee & Burton, 1997; Rezaee et al., 2004). Ibrahim, for example, argues that a bachelor’s degree in accounting should be a prerequisite for the study of fraud and forensic accounting. As the following comment demonstrates, Ibrahim suggested placing two undergraduate forensic accounting courses toward the end of the accounting bachelor’s degree to build familiarity with forensic accounting, with a postgraduate degree programme being offered for those interested in pursuing a career in forensic accounting:

Ok, I will tell you, I imagine that this topic should be taught as courses, not as an undergraduate programme, for a key reason: forensic

accounting goes beyond accounting to more advanced concepts and procedures. However, it still should be taught at the bachelor's degree, but how? There should be two papers in forensic accounting; one is principles, and the other one is about fraudulent financial reports analysis. Now, for the postgraduate, for the master's degree, there should be a stand-alone programme...for those interested in finding a job in forensic accounting. (Ibrahim)

The other group of participants referred to a number of the education-related barriers and socioeconomic factors that were discussed in section 6.4 as barriers to offering a stand-alone undergraduate forensic accounting programme. However, there was acknowledgement among those participants that, while there may be barriers to overcome in order to be able to offer a stand-alone forensic accounting programme in the short-run, those barriers are surmountable in the long run. Hence, the participants once again highlighted the significance of gradually offering forensic accounting education, as this approach would allow education providers to plan and prepare for the successful progression from one level of offering to another, as illustrated in the following:

...like I said earlier, [offering] a stand-alone programme, where a person graduates as a forensic accountant, may take another 10 years. However, it should be [offered as] courses integrated into the bachelor level until there are enough teaching materials and faculty members who can teach these materials. I mean now in Jordan, how many [academics] know how to teach forensic accounting? It is an idea that you need to propose to the society. Hence, you need to develop the current curricula by letting the student take 6 or 9 hours³¹ of forensic [accounting]. (Hashim)

8.2.4 The specialist practice level.

Level four is a specialist track for learners who are seeking to develop a deep understanding of and a greater knowledge and proficiency in a specific, specialised area of forensic accounting such as money laundering, digital forensics, or litigation support, and expert testimony. This specialist track can take the form of a stand-alone postgraduate programme or [a] nondegree professional training course/s.

³¹ In Jordanian universities, graduation requirements are defined in terms of credit hours (Fraij & Shihab, 2012). One credit hour is equivalent to 16 lecture hours (The Education, Audiovisual and Culture Executive Agency (EACEA), 2012) (see section 2.4 for details).

Learners who have completed a postgraduate programme or [a] professional training course/s are expected to have acquired highly specialised knowledge and skills that allow them to enter a specific field of forensic accounting as a specialist practitioner (West Virginia University, 2007).

The learning outcomes at level four equate to those within levels one and two, with the addition of a number of learning outcomes similar to, but more profound than, those at level three. At this level, the purpose is to select and focus on a particular, specialised area of forensic accounting. Level three bachelor's degree in forensic accounting—is, thus, not the only pathway to level four, a stand-alone postgraduate programme or [a] nondegree course/s, as level four will be open to those who studied forensic accounting topics at level two via multiple undergraduate courses. Level four may also be open to practitioners who have extensive forensic-related professional experience (West Virginia University, 2007).

Most survey studies (e.g., Davis et al., 2010; Daniels et al., 2013; Kramer et al., 2017; Rezaee & Burton, 1997; Rezaee et al., 2004) that addressed the level at which a forensic accounting programme should be offered included three 'degree' response alternatives, namely stand-alone undergraduate programme; component of an undergraduate programme; and, graduate programme. This study, however, finds that several participants, and practitioners specifically, seemed to be more inclined to favour the 'nondegree' courses and professional training option. Waseem and Mariam, for example, explained that higher education is a huge time commitment and financial investment that not everyone in Jordan can afford (see section 2.5). Thus, Waseem and Mariam anticipate that offering nondegree courses and professional training in forensic accounting will help to close the gap in the supply of both entry-level and experienced professionals with education in forensic accounting, as the following comments illustrate:

Honestly, from my experience I can tell you that many employers in Jordan don't consider the bachelor degree as a must. Many accountants and even auditors just hold 1 or 2 year diplomas and they are doing very well. By limiting the forensic accounting education to the bachelor and graduate degrees, we deprive many young people who think about pursuing careers in accounting, as well as a large category of practitioners who can't afford university fees, from contributing to the

profession and society. (Waseem)

For me now if you really want to benefit me, I am interested in a training course. Now if you would talk about establishing the concept through an academic degree, I would say yes, why not? However, I am talking now about my organisation, you are talking to someone who is already practising...from my point of view as a staff or a practitioner, a training course, where we discuss forensic accounting from a practising perspective, will be more relevant. Also, making time and paying fees to return to study at university is not an option for many of us. (Mariam)

Moreover, this study suggests that training institutions in Jordan will be more willing and able than universities to offer forensic accounting education. Fadi, for example, explained that training institutions have the financial and professional capabilities to establish and offer forensic accounting education, while Jawad reasoned that universities, unlike training institutions, are subject to the problems of bureaucracy and resistance to change that hinder curriculum change (Kezar, 2011).

I argue that forensic accounting should be taught as a separate discipline at the government institutions. For example, the Institute of Banking Studies is a government institution that controls banks, trains bankers, and so on. If you suggest to them the forensic accounting topic they will find it very interesting. I also got news that a week ago the Audit Bureau received funds from the International Monetary Fund to establish a huge training institution, so if you suggest to them a forensic accounting course they will be very interested. So, I imagine that it [a forensic accounting course] can be offered as a stand-alone training course at the government agencies in general and government institutions. Even if you offer it to the Police Academy or the Judicial Institute, you know they have their own curricula, so if you offer forensic accounting courses there, this will be welcomed. (Fadi)

The problem with universities is that they are slow and suffer from bureaucracy and sometimes there are long procedures to modify a curriculum. Therefore, it could be easier and faster to offer forensic accounting topics through the institutions and professional bodies rather than the universities. (Jawad)

In line with West Virginia University's (2007) model curriculum in fraud and forensic accounting, this study recommends the employment of a two-pronged approach by offering forensic accounting education at both the degree and nondegree and professional training level. A two-pronged approach is necessary to

ensure a wider range of students who face different challenges, and have diverse learning ambitions and requirements, can be catered for within the limited accounting education change possible at Jordanian universities.

8.3 Content Selection and Organisation

One of the key functions of learning outcomes is that of guiding decisions about the selection and organisation of content and instructional strategies. Content selection and organisation and instructional strategies should be consistent with, and express the vision of, the learning outcomes (Tanner & Tanner, 1980). The content should also be properly balanced in terms of the time and resources available. As Taba (1962) explains,

because the possibilities of knowledge and of learning are boundless, curriculum makers and teachers always face the problem of selection: what content, which learning activities are the most important, most necessary, and most effective. A platform of desired objectives supplies a criterion of these decisions. No matter what its nature, the statement of desired outcomes sets the scope and limits for what is to be taught and learned. (p. 197)

The content detailed in this section will assist forensic accounting course developers and education providers to select and organise the content to achieve the required levels of competency within the different levels of offering of forensic accounting education (see section 8.2).

8.3.1 Knowledge and skills.

This subsection provides guidance regarding the knowledge to be taught and the skills to be mastered within a forensic accounting education programme. While no learner is expected to possess all the knowledge and skills suggested in this section, the more of this knowledge and these skills a learner possesses, the better qualified he or she will be to develop a good career in forensic accounting.

Curriculum content is a body of facts, ideas, concepts, interpretations, applications, and technical and soft skills that are presented, discussed, and involved in a course

or programme (Taba, 1962). In this study, the term ‘soft skills’ is used as an umbrella term that, as Low, Samkin, and Liu (2013) explain, refers to a diverse range of personal qualities, attributes, and social skills. Examples of soft skills include communication skills, leadership abilities, team player skills, analytical skills, critical thinking skills, problem-solving skills, and judgment skills.

As noted in the literature review, several survey studies (e.g., DiGabriele, 2007; Davis et al., 2010; McMullen & Sanchez, 2010) examined the perception of academics and practitioners regarding the relevant knowledge and skills of forensic accountants. Extending the literature, this study attempts to garner the perceptions of participants who are argued to be representative of the wide range of forensic accounting education and services stakeholders in Jordan on a framework for forensic accounting education. Furthermore, by employing interviews, this study goes beyond the traditional survey approach followed in most research (e.g., Daniels et al., 2013; Rezaee et al., 2004; Smith & Crumbley, 2009) to take a closer examination of the stakeholders’ perceptions on how this knowledge and those skills translate into a learner’s being an effective practitioner.

This study builds on the West Virginia University (2007) model curriculum in fraud and forensic accounting which identified three primary content areas for forensic accounting education, namely criminology, fraud examination, and forensic and litigation advisory services (see section 4.4). In doing so, this study introduces a few modifications to the West Virginia University (2007) model curriculum. This study suggests that knowledge and skills to be taught within a forensic accounting programme can be classified under five learning areas: prerequisite knowledge and skills; fraud examination; forensic accounting in the digital environment; ethics; and, litigation support and advisory services. This classification is consistent with the definition for forensic accounting proposed in this study (see section 4.3). The following table summarises the knowledge and skills expected to be covered under each learning area.

Table 8.3. Knowledge and skills required for study under each of the forensic accounting areas

Area of learning	Knowledge	Skills
Prerequisite knowledge and skills	Accounting principles Auditing principles Financial reporting principles Corporate and criminal law principles Business ethics principles	Financial report reading Journal entry preparation and posting Financial statements analysis
Fraud examination	Forensic accounting concepts, techniques, and strategies Fundamentals of fraud Fraud and corruption types and implications The gathering and analysis of documentary and physical evidence Interrogation techniques Interviewing techniques Behavioural sciences, including criminology, psychology, sociology, and anthropology, in relation to fraud examination	Communication skills Body language skills Balancing friendliness with professional distance Analytical skills Logical reasoning Problem-solving Research for information Critical observation Scepticism Inquisitiveness Objectivity Persistence Smartness Creativity Team work Intuition Interviewing skills Interrogation skills
Forensic accounting in the digital environment	Cybercrime and cyber security Information technology Technology-based fraud solutions Big data analysis	Adaptability Information technology capabilities The gathering and analysis of digital evidence
Ethics	Jordanian culture Islamic culture and ethics Key Islamic rules on transactions such as <i>riba</i> (usury), <i>zakah</i> (obligatory alms) and <i>facad</i> (corruption) Comparative study of majore codes of ethics	Respect Responsibility Integrity Compliance Gender-sensitive communication skills
Litigation support and advisory services	Corporate, criminal and commercial law Legal and legislative knowledge in the key industries and fields Litigation support techniques Expert testimony techniques	Dispute resolution Presentation skills Using documentary, physical, and digital evidence in court Oral and written communication

Source: Author

8.3.1.1 Prerequisite knowledge and skills.

This study finds that understanding accounting and auditing concepts and techniques is important for creating a base upon which forensic accounting learning can be built. In line with the extant literature (e.g., Rezaee & Burton, 1997; Rezaee et al., 2004; West Virginia University, 2007), all participants considered knowledge of accounting and auditing to be a prerequisite for the study of forensic accounting.

Yahya and Ammar, for example, explained that learners need to study accounting principles, including the basic accounting equation, the double-entry principle, and the accounting cycle, in order to be able to read and understand accounting records and documents, and, consequently, to comprehend and interpret financial information. The following comments illustrate this point of view:

Absolutely he should already have studied the accounting principles; he would already have accounting knowledge. I mean I cannot imagine someone new to the [accounting] curriculum coming to study forensic accounting! [Because] he should have the concepts that will allow him to communicate. (Ammar)

As he [the forensic accountant] needs to deal with documents, the first thing he should learn is how journal entries are prepared, the double entry [system]; he needs to learn the posting to accounts, ok? between assets liabilities, ok? so he gets familiar with [accounting] basics. After this he needs to learn the document lifecycle, then document fraud. Here he starts to get a forensic experience and a skilful touch. (Yahya)

As the following excerpts show, other participants considered that some advanced accounting concepts, in addition to external and internal auditing, corporate and criminal law, and business ethics, were important topics, as these would provide the foundation for upper-level discussion on forensic accounting:

Yes, I think you need to have knowledge of both accounting and law. And when I say accounting I mean maybe advanced accounting plus auditing. You must have those both accounting and auditing. And then on the legal side, you need to have really clear understanding of corporate law and criminal law. (Adam)

We start first with the accounting [courses] but not too much, just accounting one and two, I mean financial accounting and then financial ratios or financial analysis. After this, internal audit and external audit. And the last thing, the ethics and sanctions. Thereafter, we start with the forensic accounting topics. (Yasin)

There is no contradiction between these emphases on both basic and advanced accounting concepts as prerequisites for forensic accounting education. However, while knowledge of basic accounting concepts is considered as a prerequisite for surface level discussion on forensic accounting (at the familiarity or the comprehension level), knowledge of advanced accounting concepts is seen as a

prerequisite for upper-level discussion on forensic accounting (at the generalist or the specialist practice level).

8.3.1.2 Fraud examination.

Fraud examination is a major component of forensic accounting. Fraud examination “is a methodology for resolving fraud allegations from inception to disposition, including obtaining evidence, interviewing, writing reports and testifying” (West Virginia University, 2007, p. 6). Hence, forensic accountants are expected to be able to actively and legally collect and analyse evidence and to properly communicate their findings to the relevant parties and/or judicial authorities (Smith & Crumbley, 2009; Hopwood, Leiner, & Young, 2012; Young, 2008). Additionally, forensic accountants should be familiar with the different fraud-fighting strategies including preventing fraud from occurring, detecting fraud proactively, investigating suspected fraud, and following up when an investigation uncovered a fraud through modifications to the system of internal control and/or when legal prosecution was called for. The following comment illustrates this point:

They [forensic accountants] should be able to identify and detect fraud and fraudulent financial reporting, recognise misappropriation of assets, design internal control systems, and collect evidence to support a fraud case through litigation support and expert testimony. (Omar)

Furthermore, this study highlights that analytical proficiency is critical to the forensic accountant’s ability to collect and deal with the different types of evidence and, thus, to perform forensic accounting functions. This finding is in agreement with Davis et al. (2010) who state that “the need to be analytical in a forensic accounting engagement may be the initial and most important overall characteristic, without which other traits and abilities would be difficult to develop” (p. 10). Participants indicated the different types of evidence that forensic accountants must be able to deal with. These include: testimonial evidence, which is gathered from individuals through interviewing and interrogation; documentary evidence, which is gathered from computers, databases, emails, and written or printed sources using a range of investigative techniques such as data mining, computer searches, and financial statement analysis; and, physical evidence which often involves experts

undertaking forensic analysis of fingerprints, weapons, and other tangible evidence that might relate to fraudulent acts (Albrecht et al., 2016).

Moreover, several participants acknowledged a role for intuition in collecting and analysing evidence. Jawad, for example, stated:

The analytical skills are essential [for forensic accountants]. However, some people have also the ability to see beyond the obvious using intuition. Those people have a greater ability to become forensic accountants.

Nonetheless, a number of participants were reluctant to state that intuition can be taught. Practitioners, specifically, argued that it is more likely for intuition to be acquired through work experience, compared to formal education. This argument is in line with Plessner et al. (2011) who state that the input to intuitive processing is knowledge acquired through experience as the following excerpt shows:

Intuition is a process of thinking. The input to this process is mostly provided by knowledge stored in long-term memory that has been primarily acquired via associative learning. The input is processed automatically and without conscious awareness. The output of the process is a feeling that can serve as a basis for judgments and decisions.
(p. 4)

In line with Davis et al. (2010), this study, however, suggests that both experience and education benefit the development of intuition. Davis et al. (2010, p. 20) explain that “the two dimensions [experience and education] may be interactive in that an individual with greater depth of experience may gain more knowledge and more depth of knowledge may facilitate the benefits of experience”. Hence, this study proposes that educational programmes for forensic accounting can provide learners with a considerable amount of the training required to develop insight and intuition. This training can be achieved through the use of case studies and practical examples in particular (see section 8.4).

Furthermore, while this study supports the role and importance of intuition in fraud examination, it highlights that it is vitally important to teach students, first, to appreciate the boundaries of intuition and settings that foster its optimal functioning

and, second, to look objectively at the facts behind cases and avoid being controlled by irrelevant considerations and prejudices. Teaching this skill is important because, while intuitive decision making is “a form of rationality as capable of being guided by scrupulousness and fidelity to truth as analysis is (...), it is nonetheless at least partly guided from personal experience and personal values, and, [thus], does produce [subjective] error because of that” (Daniel, 2004, p. 8). Hence, as Yahya explained, forensic accountants must have self-control skills that will allow them to distinguish between a personal desire and an opinion that is built on factual evidence:

As a forensic auditor, just as it is for a juror, you are not allowed to show your feelings in the case under consideration. You are to show a technical experience. I mean you give your opinion on a document or an incident, whether it's right or not right, not my desire or that I am upset or I hate so I go in a certain direction. (Yahya)

Similarly, Jawad stressed that the investigator should bear in mind that “the interrogation is a guilt-presumptive process” and that “the suspect is innocent until proven guilty”. Thus, the investigator should avoid having a guilt-presumptive attitude toward suspects which is based on premature conclusions. Jawad explained that the investigator must learn to approach the suspect in an appropriate manner using legally sound and fair interviewing and interrogation tactics and avoid problematic tactics, as the following excerpt shows:

Another thing, interrogations that we undertake are not guaranteed to be accepted in court and do not have the value of a judicial authority. One time the lawyer said that the confessions that had obtained by the investigators might have been produced under pressure that may even go as far as the using of a weapon. Therefore, an investigator should be smart and be friendly and nice, as appropriate. (Jawad)

Interviewing is an integral part of a forensic accountant's duties (Rezaee et al., 2004). Forensic accountants may interview or interrogate suspects, victims, witnesses, or experts to collect information and evidence. Participants indicated a range of skills that a good investigator should possess. Khalil, for example, mentioned that a good investigator uses body language to communicate effectively with the interviewee and understands his/her nonverbal signals including facial

expressions, tone of voice, and body motions. Moreover, Khalil and Hamid explained that the investigator should be aware that suspects can be either cooperative or uncooperative or may change from one mood to another throughout the interrogation, and, thus, the investigator should be able to adjust appropriately. The following comments illustrate these points:

He should be familiar with the body language and interrogation skills. You know that you will need to change the [questioning] techniques at the right time to be able to uncover the hidden information. So, there are skills, they train them on these things in the security departments. But unfortunately, as auditors, they don't teach us these skills. (Khalil)

...when you have someone who has committed fraud, he may be aggressive and difficult to deal with. In order to let the person in front of you feel comfortable around you, and to give you the information you need, you should be intelligent in the way you approach him. (Hamid)

Additionally, this study finds that having strong communication skills is a must for a forensic accountant. Support for this finding can be found in the extant literature, where Heitger and Heitger (2008) note, “although effective communications are crucial in all areas of business and accounting, in forensic accounting they are indispensable” (p. 568). Forensic accountants need to establish a rapport with individuals believed to be able to provide information and to be friendly and fair in all dealings with them. According to Ammar, respondents will appreciate the consideration and recognition that they receive from forensic accountants and, consequently, will be more likely to cooperate in any investigation or inquiry. Nonetheless, Ammar stressed the importance of balancing friendliness with professional distance, as the following comment illustrates:

Know how to get the information that you need from the other person, but without freaking him out. You know a big part of the forensic auditor's work is to try to gather information. An important part here is to let the one in front of you feel comfortable around you. Not to let him feel like you invaded his work environment, like his department, as his enemy. This way they will not deal with you and they will not interact with you.... So yes, he needs to have a leadership personality. Possess wisdom and balance. A balance between social relations and professional relations. And the other thing, he should also be, like they say, honey-tongued. (Ammar)

Finally, Hashim and Adam indicated that investigators need to be smart and inquisitive and to have an attitude of professional scepticism so they do not miss potential red flags. They explained that investigators also need to have skills that enable them to read between the lines and dig beneath the surface to uncover potential indicators, attribute meanings, and avoid taking information and evidence gathered at face value, as the following comments illustrate:

Look, a forensic accountant should first have a high IQ; not just anyone can become a forensic accountant. Two, he should, frankly, have depth, depth. Like we said that time, he should not just look at the interface of things Three, I always think that a hasty guy cannot be an accountant; he needs to be untiring. (Hashim)

I think they need to have three [things]; I think they need to have patience, they need to be curious, and they need to be innovative. So, these are in my opinion characteristics of somebody who is thinking about entering this field. So, they must be patient because most of the time the information is not gonna jump at you immediately, it is gonna take some digging to get what you need. Curiosity means that you are not satisfied with the answers that are given directly. Which means that you are again going to move around and take what has given to you, and that is going to lead to more discovery obviously. Innovativeness again links with patience and curiosity, as in order to obtain the missing information, you might need to think outside the box. (Adam)

Although participants agreed that forensic accountants need to possess specialised investigative knowledge and skills, this study stresses that the investigative role, and, thus, the knowledge and skills required, of forensic accountants should not be confused with those of police and judges. While the focus of forensic accounting is the development and presentation of evidence, the enforcement of law and the dispensing of justice are the responsibility of the police and judiciary (Albrecht et al., 2016). This finding is consistent with earlier discussion in section 7.3, where participants highlighted the complementary relationship between forensic accountants and the enforcement agencies and judicial authorities.

8.3.1.3 Forensic accounting in the digital environment.

Fraud is constantly evolving as perpetrators employ modern digital technology to create more diverse and complex schemes (Pearson & Singleton, 2008). The increasing reliance on the Internet for electronic communication in business and paperless transactions provides the opportunity for fraudsters to cross international boundaries and gain easy access to a wide range of confidential information that can be misused to commit fraud (Albrecht et al., 2016). Hence, as the following comment illustrates, participants believe that forensic accountants need to take a much more proactive approach to fighting fraud:

The way someone commits a fraud is totally different now. We no longer have robbers with masks and guns caught by surveillance cameras and leaving weapons and other evidence behind to use to track them. A fraudster now would be with a laptop, lying on sofa at home and stealing millions of dollars from banks...So what is the solution? The best thing to do is to be prepared and to put proactive fraud prevention plans and strategies before you get in serious trouble. (Yasin)

As fraud in today's business world is often committed through technology, forensic accountants need to keep up with technological advances and to be able to apply technology-based fraud solutions (Lang et al., 2014; Taylor et al., 2014). Participants in this study stressed that forensic accounting students should be exposed to the specialised skills and knowledge of digital forensics and cybercrime³² technology. The following quote from Khalil highlights this need:

We need to bring professors specialised in cybercrime and security, because these crimes started to increase and they are the first risk according to many studies. Even in the risk management [course] they teach cyber security and they have the basic IT knowledge. Because he [the fraudster] will not break the door, get inside and steal. He will steal using the computer. (Khalil)

Cybercrime is usually harder to track than traditional crime (Albrecht et al., 2016). Unlike the traditional criminal, the cybercriminal does not have to be present at the scene of the crime. Cybercriminals usually operate from remote locations and quite

³² Oxford Dictionaries (2017) define cybercrimes as “criminal activities carried out by means of computers or the Internet”.

often from other countries, under the umbrella of anonymity, which makes identification of them challenging (Broadhurst, 2006). Furthermore, the identification of a cybercriminal does not guarantee that a prosecution will follow, due to the cross-border nature of cybercrimes and the legal complexity resulting from the involvement of parties from different legal jurisdictions, as Yasin explains in the following comment:

Now the major problem is that even if you were able to identify this fraudster or hacker, it would still be, I won't say impossible, but too hard to prosecute them. They may be living in a country where they don't have a cybercrime law, or they may have different law and legislations, or the authorities there are not willing, or don't have the ability to cooperate with you. (Yasin)

This study stresses that to be able to handle electronic data and deter cybercrime, forensic accountants need not only more sophisticated tools and strategies, but also information technology abilities (Lang et al., 2014). Cybercrimes take several forms including ATM fraud, identity theft, and hacking (Taylor et al., 2014). Cybercriminals attack businesses and individuals for several reasons including financial gain, emotional motives like anger, revenge, and extortion or even to serve political agendas. However, even cybercrimes that are not driven by financial motives often involve financial transactions (Albrecht et al., 2016). Hence, this study underscores the importance of the forensic accountant's role in combating cybercrime.

8.3.1.4 Ethics.

The focus of this subsection is to draw attention to the potential effect of teaching ethics and Islamic theology on ethical attitudes of learners. While this study highlights the role that factors outside of the educational system (that is, political and economic factors) may play in shaping ethical standards and behaviour (see section 7.2), it stresses that education is essential for the ethical development of learners (Drumwright et al., 2015). Though there exists general agreement on the value of teaching business ethics (Conroy & Emerson, 2004), there is a lack of agreement on the most suitable and effective approach by which it can be achieved (Brady, 1999). In line with Corey et al. (2005), this study recommends the employment of dual philosophical and religious approaches to teaching ethics. In

this context, this study presents teaching religious values as a complementary approach that supplements rather than is a substitute for the philosophical-based traditional approach to teaching ethics. The rationale here is that while philosophical ethics can improve ability to reason about ethical issues (Brady, 1999), they are too general and theoretical and tend to create the false impression that ethics can be universalised (Stark, 1993; Ruhe & Lee, 2008). The incorporation of religious concepts and cultural values, on the other hand, has the potential to develop learner sensitivity to religion and culture-related differences and his/her ability to make context-sensitive decisions (Drumwright et al., 2015).

This study argues that understanding the concepts of ethics and corruption from the Islamic perspective will help forensic accountants to evaluate the impact of religion on perpetrators and organisations in Jordan and to apply ethical principles in the context of fraud examination. This argument is supported by existing research (Abuznaid, 2009; Dogarawa, 2013; Rice, 1999; Srnka, Gegez, & Arzova, 2007). Participants viewed religious and ethical topics such as Islamic culture, Islamic morals, and ethics as important components of the forensic accounting curriculum. Malik, for example, argued that the Islamic concept of ethics or “what is good or bad” differs from the Western one, because it is derived from God through the Qur’an and Sunnah rather than people’s sovereignty, which decides the laws and standards that govern Western societies. Malik explained that *riba*—‘usury or interest’—, for example, is considered as “financial corruption” in Islam, whereas it is considered as a crucial economic element in Western societies. Thus, as the following comment shows, Malik believed that it is important for learners studying forensic accounting to have knowledge of the concepts of ethics and corruption within an Islamic framework of understanding:

The separation of religion and these things [concepts of ethics] is a fundamental principle in the West. But in Jordan this is absolutely different. For example, in the Qur’an, Allah the Almighty has never ‘fought’ any specific sin as he has fought those people who ‘eat the property among themselves in vanities’; it is a ‘war against *riba*’³³. The

³³ Malik used the terms fought, war and ‘eat the property among themselves in vanities’ referring to two verses in the holy Qur’an that talk about *riba* (‘usury’). The interpretations of these verses are as follows: First, “O you who have believed, fear God and give up what remains [due to you] of interest, if you should be believers. And if you do not, then be informed of a war [against you] from God and His Messenger” (2, 278-279). Second, “O ye who believe! Squander not your wealth among

word ‘war’ has never been mentioned in the Qur’an except in the context of *riba*, and it is considered as a financial corruption. (Malik)

This argument is consistent with earlier discussion in section 7.4, where participants highlighted that forensic accounting students in Jordan need to be exposed to the key Islamic rules and principles on transactions such as *riba* (usury), *zakah* (obligatory alms), *maks* (tax), and *facad* (corruption).

Additionally, participants explained that religion has a significant role to play in Jordanians’ thinking about ethical behaviour and, therefore, supported the incorporation of religious concepts and spiritual values in teaching ethics. Malik, for example, clarifies that, by adding the spiritual dimension, Islam provides additional incentives for people to engage in ethical, and to avoid unethical, behaviour through its teaching concerning reward and punishment in the hereafter, as the following comments demonstrate:

There are general basic things; of course, nothing will work without it. The basic meanings of belief in Allah, the hereafter, and the [day of] judgment. (Malik)

Furthermore, participants argued that a major advantage of discussing ethics in the light of scriptural sources is that doing so provides legitimacy in the process of discerning ethical and unethical behaviour. This argument is consistent with earlier discussion in section 7.4, where participants highlighted that the Islamic heritage has a rich tradition of moral standards (Rice, 1999; Srnka et al., 2007) that should give legitimacy to anticorruption initiatives in Jordan.

8.3.1.5 Litigation support and advisory services.

Litigation support is a major component of forensic accounting (Luke, 2013; Wolosky, 2004). Although forensic accounting as a distinct discipline is relatively new, accounting practitioners in Jordan have been performing a wide range of

yourselves in vanity, except it be a trade by mutual consent, and kill not one another. Lo! Allah is ever Merciful unto you. And whoso doeth that through aggression and injustice, we shall cast him into Fire, and that is ever easy for Allah” (4, 29-30).

litigation services for many years, including resolving disputes with tax authorities, settlement assistance, business valuation, and expert witnessing. Those who perform these services are usually highly experienced accountants who combine their accounting experience with specialist skills and knowledge related to the task they perform. For example, a court might appoint an experienced current or former accountant at the Income and Sales Tax Department to provide his/her technical comments on a tax dispute case, while an accountant with lengthy real estate experience may be appointed to give his/her opinion on a property valuation issue.

However, several participants explained that finding an expert who has the appropriate professional knowledge and skills can be challenging for two reasons: first, is the shortage of experts compared to the increasing demand for litigation services in Jordan; second is the absence of a professional body that qualifies and represents forensic accountants. This finding underscores the importance of developing forensic accounting not only at the tertiary education level in order to bridge the gap between litigation services supply and demand, but also at the practice and professional levels to represent, support, and guide graduates and practitioners already working in the field (see section 7.3 for a related discussion).

Knowledge of law and regulations and litigation skills were perceived to be crucial for forensic accountants. This finding is in line with the extant literature (e.g., DiGabriele, 2007; Davis et al., 2010; West Virginia University, 2007). Participants believed that forensic accounting courses should address the knowledge base and skills that are essential for practising litigation services. Imran and Yasser, for example, argued that learners need to be familiar with laws and regulations that are relevant to the key industries and business fields in which forensic accountants may work. The following comments demonstrate this point:

He must have familiarity with the technical legal issues in the field that he is going to work on, either currencies, stocks, investment, investment funds, whatever this field is. (Imran)

They need to have the industry experience, you know what I mean? If you are going to an investment company, and there are complex accounting transactions, you cannot audit what you don't understand. That is what I tell my students and my colleagues, the juniors working with me. Basically you have to understand the transaction; you have to understand the nature; you have to understand the industry. (Hasan)

Moreover, forensic accountants should be able to demonstrate oral and written communication skills, expert testimony skills, and negotiation and dispute resolution skills if they are to be able to effectively advise clients and advocate on their behalf (Albrecht et al., 2016). According to Waseem, a forensic accountant needs to have strong negotiation and oral communication skills. He explained that the forensic accountant should be able to present his/her thoughts and findings in a logical and persuasive manner, using professional and appropriate language, while observing the etiquette and procedures of the court, as the following comment shows:

Companies might appoint forensic accountants to negotiate with other companies on their behalf, to resolve an issue with another company or someone. Here the forensic accountant needs to have strong negotiation skills and to be familiar with the law and regulations related to the issue. Now, in other cases, the forensic accountant would be called to serve as a witness or an expert at the court. Here he must also have another set of skills, like being familiar with the courtroom etiquette, procedures, and communication style. Not anyone can appear in courts either as a witness or an expert. They need to [learn] how to address the court, to present their points in a professional manner, to speak clearly and concisely, and they need to be familiar with a range of legal terms. (Waseem)

Similarly, Adam stressed that forensic accounting courses should strongly emphasise producing graduates with strong writing skills. Adam said that forensic accountants have a responsibility to produce written reports that meet the high standards of writing within the legal arena:

I think when it comes to forensic accounting you really need to be able to put a case together that needs to be read by an expert. So, we have got to keep in mind that forensic accountants are going to be working within a legal framework and with lawyers. They do an excellent job in writing, so once we move from the classical accounting to another field, we should consider the aspects of these field. (Adam)

8.3.2 Balance of content: Depth vs. breadth, knowledge vs. skills, and processes vs. values.

Balancing content appropriately is important in any curriculum (Taba, 1962), and so the participants' opinions were sought on the relative balance required in terms of depth versus breadth, knowledge versus skills, and processes versus values. It is important, however, to note here that the participants discussed this issue in the abstract, without reference to any specific level of offering (Table 8.2 illustrates the different levels of offering of forensic accounting education). Nor were they asked to indicate how many, or what, topics should be covered to reach a specific percentage in terms of balancing content. Determining and balancing appropriate content ratios at these detailed levels is beyond the scope of this section. However, while this section does capture the perceptions of those who represent the major forensic accounting education stakeholders in Jordan concerning the merits of focusing on either breadth or depth, knowledge or skills, and processes or values in the forensic accounting curricula, it allows curriculum developers at each educational institution to retain the task of deciding how much and what to cover, whilst also taking into consideration a wide range of determinants in their specific context.

The participants had very different views regarding the balance between breadth and depth. One group preferred breadth over depth of coverage, but proffered different reasons for this choice. A few argued that it is better to cover the widest range of forensic accounting concepts that students may encounter either in practice or if they proceed further in education. Others added that broad coverage suits the students' modest knowledge of forensic accounting as a new topic to study and gives them a broader view of the theoretical concepts and practical aspects, and, thus, richer understanding of forensic accounting. Jawad illustrated this position:

Based on my experience with students, I think it should be broad but not deep. Because the student has not yet been exposed to this topic, so it would be hard for him to go in depth. I will give 70 per cent to the breadth. (Jawad)

Furthermore, a few participants believed that adopting breadth when teaching forensic accounting provides the basis for further content exploration through self-directed study. Hamid, for example, perceived acquiring broad forensic accounting knowledge in class as an entree to a deep knowledge that students can gain from their own study and research, as the following comment shows:

You need to give only the basics to the student, because books are available everywhere. And the student needs to do research, investigate, and work to find further knowledge. (Hamid)

The other group of participants preferred depth over breadth of coverage, claiming that in-depth coverage of the major forensic accounting topics will benefit students far more than a superficial coverage of numerous topics. Yasin, for example, argued that teaching too many forensic accounting topics does more to distract, and perhaps confuse, students than to give them a broad knowledge. Yasin believed that focusing on in-depth learning allows students to concentrate on the major concepts and topics in forensic accounting and so gain a more specialised knowledge of forensic accounting, and one that is more relevant to the business world, as the following excerpt shows:

We need to focus, focus. It is better to specialise in particular topics. This is the era of specialisation. The depth should be not less than 80% to 90%. (Yasin)

Participants also took very different positions concerning the knowledge versus skills debate. On the one hand, some participants advocated a knowledge-led approach, taking a view that forensic accounting skills should not be learnt in the classroom, but through on-the-job experience. Hamid, for example, believed that practice and real experience are the best way to develop forensic accounting skills. He argued that instructors should design and teach content in a way that ensures that students gain optimum knowledge of the forensic accounting discipline. By then building on the knowledge they have gained, graduates can develop skills through workplace learning:

A hundred per cent for knowledge, and he [sic] will get the skills through work; this is something that we cannot teach. (Hamid)

When asked to clarify what made him believe that skills cannot be taught at university, Hamid supported his arguments by pointing out the poor state of higher education in Jordan. He explained that the lack of resources at Jordanian universities (see sections 6.4 for details) prevents the transition from the current conventional lecture approach to the modern teaching approach that is necessary to allow students to acquire critical skills, saying:

In my opinion education in Jordan lacks practice; this is a fundamental issue. I mean at our universities in general, it is theory teaching more than preparing someone to be, let's say, an external auditor. This is unfortunately the teaching approach. Now, if we really want to change this, we need to adopt an approach that is based on actual case studies, not just theory and lectures and lecturing. (Hamid)

Hence, while none of the participants who favoured a knowledge-based approach questioned the importance for forensic accountants to have skills, they, like Hamid, tended to perceive the focus on knowledge rather than skills as a matter of pragmatism rather than a choice. Furthermore, this position could be seen as context-driven rather than a generalisation.

Classically, those who advocate a skills-led approach would be on the other side of the debate (Hirsch, 2016). However, in this research, the other group of participants took more of a moderate position on the issue, arguing that curriculum developers and instructors should attempt to follow the 'best of both worlds' approach. This approach involves mixing knowledge and skills within the forensic accounting curriculum. To produce a balanced curriculum, these participants suggested directing a range of between 40 to 60 per cent of the focus toward skills. A balanced forensic accounting curriculum, as Ammar explains in the following comment, will allow students to acquire significant knowledge, develop necessary skills, and connect ideas to the real world.

For the forensic accounting or audit, it is also how much does he [the forensic accountant] has skills that would allow him to make use of the knowledge that he has acquired. If he got excellent grades but he doesn't have the skills of using the knowledge, how would I [as an employer] benefit from him? (Ammar)

In line with Hirsch (2001) this study suggests that neither covering many forensic accounting topics superficially nor digging deeply into fewer topics, and in the process sacrificing broad coverage, is an optimal approach to teaching forensic accounting. Instead, curriculum developers should abandon the polarity between breadth and depth and seek a reasonable balance between these two poles. In like manner, this study suggests that success in forensic accounting education depends on teaching field-specific knowledge as much as it depends on teaching critical soft skills. The best way to achieve a balance between any depth-breadth and knowledge-skills dichotomy, according to Hirsch (2001), is by teaching a diversity of core knowledge topics that will allow the learner to gain a broad context and develop a sense of the whole domain while, simultaneously, teaching a reasonable number of specific examples to create the desired depth of learning and develop soft skills. Broad knowledge is seen here as a prerequisite to developing “well-rounded” and “life-long” learners and, hence, as an entree to real-world and example-based deep learning (p. 23). In forensic accounting, students need, for instance, to know what ‘forensic accounting’, ‘the fraud triangle’, ‘the common types of fraud schemes’, and ‘the major strategies and techniques of fraud examination’ are in principle not simply to develop a sense of the field as a whole; in order to gain real insight and develop skills in these areas/topics, they also need to examine case studies of forensic accounting and fraud examination. Achieving a specific level of depth learning requires careful consideration of the number and complexity of case studies and examples used.

Developing a broad and balanced accounting curriculum, according to Sikka et al. (2007), goes beyond expanding its scope at the knowledge and skills levels to enriching the curricula with a greater space “devoted to discussions of ethics, ideologies, social responsibility or analysis of scandals, which in principle could encourage students to be more reflective” (p. 16). In line with Sikka et al. (2007), this study proposes that a broad and balanced [forensic] accounting curriculum requires a shift away from the traditional form of accounting education with its narrow emphasis on the acquisition of content knowledge and procedural skills towards a broader focus on professional values, ethics, and the social consequences of accounting and auditing practices.

As mentioned earlier, the participants deemed ethics and values as very important for accountants, in general and for forensic accountants, in particular. They agreed that it is no longer considered appropriate for accounting educators to adopt a technical and procedural approach to accounting education (see section 6.3.3 for a related discussion). Referring to the “many business scandals and corporate collapses in recent years”, Fatima, for example, argued that many of the problems associated with accounting practice today arise from accounting education providers’ placing inadequate emphasis on values. According to Fatima, the growing reliance on technology poses challenges; consequently, employers expect accounting graduates to be adequately prepared to handle ethical issues:

These days the focus on values in accounting education should be greater than before, and especially for those interested in forensic accounting, who are supposed to be specialists in handling fraud and corruption issues. You know about the many business scandals and corporate collapses in recent years, and every day we hear about something new. Not only new scandals, but also new ways to commit fraud. Thus, employers now are expecting their employees to be able to deal with these issues and protect their businesses. (Fatima)

Similarly, Maryam argued that it is no longer merely sufficient to have excellence in procedural knowledge to meet the demands of employers and the marketplace. In her opinion, forensic accounting education must respond to changes in accounting standards and the regulatory environment that demand that practitioners can exercise more complex ethical judgment. Hence, for Maryam, the forensic accounting curriculum should focus on producing graduates who are not only familiar with a professional code of ethics, but who also have the ability to identify and handle complicated ethical issues:

Let me tell you something here, we have enough bookkeepers in the market. The market is in need for accountants with higher abilities, who can do research and keep up to date with the regulatory changes, who can judge whether this practice is ethical or not, and who understands how to solve ethical issues in a professional manner. (Maryam)

Participants suggested that placing between 10 and 30 per cent of the curriculum’s focus on values would be appropriate. Given the minimal coverage of ethics and values in the current accounting curriculum (Pergola & Walters, 2017; Sikka et al.,

2007), this range represents a good percentage. Few participants argued that offering a stand-alone ethics course would be sufficient to cover the subject, while the majority suggested that integrating ethics into core accounting and forensic accounting courses would create more meaningful and relevant discussions.

This study suggests that the determination of the number and types of topics that should be covered to reach a specific balance in terms of content depends on a range of determinants. The key determinant is the desired learning outcomes at each level of offering. These may differ from one educational institution to another, as each case is unique due to differences in context. In other words, the desired learning outcome of a master's degree in forensic accounting at one university might be different from that for another. Other determinants include: the curriculum developers' assessment of the potential employers' needs and the market demand; the educational institution's financial situation and educational capabilities; the students' background and abilities; and, the standards imposed by the authorities (the Higher Education Accreditation Commission (HEAC) in the case of Jordan). These should be considered along with the experts' and stakeholders' perceptions on the balance of forensic accounting content.

8.4 Instructional Strategies

Instructional strategies, sometimes referred to as teaching strategies, refer to the system, methods, processes, and procedures that an instructor employs to assist students' learning (Taba, 1962). Development of instructional strategies is a fundamental aspect of the curriculum. Instructional strategies have a significant impact on students' learning experiences, as they determine the nature of students' engagement with their subject and, to a great extent, the quality of learning outcomes (Lavoie & Rosman, 2007).

In the accounting context in particular, researchers assert that developing and adopting innovative instructional strategies and teaching methods will facilitate the development of the essential skills and competencies that allow students to tackle accounting problems in the business world (Buckhaults & Fisher, 2011; Grubb, 2013). Globalisation, the increased use of technology, and the implementation of

complex accounting practices have activated a series of significant changes in both the accounting curricula and teaching methods (Rhodes, 2012; Ezeani, Salome, Akpotohwo, & Chukwunwendu, 2014). This phenomenon is evident across accounting departments in leading universities that adopt innovative teaching methods as key learning tools, or as ancillary tools to the traditional method, in the courses taken.

The participants believed that instructors are responsible for leading students into a more interactive approach to learning by using a combination of instructional strategies that take students into more sophisticated learning areas such as critical thinking and creativity (Buehl, 2017; O’Flaherty & Phillips, 2015). Participants’ suggestions for interactive instructional strategies for forensic accounting include: class discussion; case studies; story-telling; writing exercises; reading assignments involving journals, monographs, reports, or textbooks; presentations by learners; lecture-demonstration by instructor(s) from another special field (guest speaker); individual or class projects; and, the use of technology such as music, movies, documentaries, and social media. It is important to note that some of the above teaching methods can also serve as assessment methods. This idea will be discussed further in section 8.5. The participants’ suggestions regarding instructional methods for teaching forensic accounting are presented below.

As discussed earlier, lectures constitute the major part of the accounting student’s learning experience in Jordan (see sections 2.6). Traditional lectures that involve instructors lecturing and students listening and taking notes predominate in accounting classrooms. Participants, including academics, expressed their dissatisfaction with this traditional lecturing approach. However, while they regard traditional lecturing as an ineffective way of teaching, the lack of resources and insufficient drive to change were seen as two major constraints on teaching in a more interactive way (see section 6.4 for details).

Rather than criticising lecturing as a teaching method, the participants focused their critiques on the overreliance on lecturing as well as on the predominant use of the traditional “transmission of information” or “teaching by telling” lecturing approach. The participants promoted a shift towards a more interactive approach to

lecturing that involves asking questions, class discussions, activities, brainstorming, and peer teaching. This finding is consistent with existing research (e.g. Blankley, Kerr, & Wiggins, 2017; Van Dijk & Jochems, 2002; Webster, 2015) which found lectures have the potential to offer important and unique educative value, particularly if activated by incorporating quizzes, discussions, peer instruction, and other interactive instructional instruments. In addition, the participants argued that forensic accounting instructors can go beyond lectures and make use of a range of interactive instructional strategies such as real-world examples, case studies, students' presentations, guest speakers, and work placements (Abeysekera, 2006). The key element of these interactive instructional strategies is the learner's active engagement in the learning process through discussion, hands-on participation, and applying information. This argument is in line with Blankley et al. (2017) who suggest that the goals of interactive instructional strategies "include not only better retention of information but also the development of students' higher order thinking skills, such as the ability to effectively analyze, synthesize, and evaluate information" (p. 103).

Consistent with the findings of Rezaee et al. (2004) and Heitger and Heitger (2008), the majority of participants perceived case studies as the most effective technique for teaching forensic accounting. For example, Adam, a professor of accounting, describes case studies as "the best way" to teach forensic accounting. He explained that forensic accounting case studies can be either real-life situations or fictitious descriptions that follow a realistic scenario, as the following comment shows:

With no doubt, number one, 100 per cent, case studies. Obviously you need to provide basic training at the beginning but then the best way to learn about forensic accounting is through fictitious cases and real cases, obviously. (Adam)

The participants mentioned a number of the benefits of using case studies as a teaching method. They explained that case studies can be useful in teaching forensic accounting principles and concepts, as well as the relevant laws and regulations in Jordan and the influence of the sociocultural context on fraud and corruption. Moreover, case studies were seen to offer opportunities for students to view the role of the private sector and different oversight agencies in Jordan in combating fraud

and corruption, the actual forensic accounting procedures that practitioners follow, the actual decision-making process, and the legal consequences of fraud and corruption.

Participants argued that case studies engage students in active learning and allow them the opportunity to critique and apply theory they have learned to realistic situations. Furthermore, participants argued that case studies allow students to develop and apply their analytical, problem-solving, decision-making, and communication skills. Yahya, for example, suggested that the use of real-world examples and case studies can make forensic accounting lectures more meaningful to students and, therefore, are likely to increase their motivation to get involved in the learning process, as the following comment shows:

Nothing can attract learners' attention as case studies can do. Like, for example, when you say, one, two, and three happened and the solutions were one, two, and three. Or when you give them [the learners] a case and ask them to suggest a solution, and then you can have an open discussion about the results that they have reached. This is more productive and more useful than any theory lecturing. (Yahya)

Support for the arguments above can be found in the extant literature where Boyce, Williams, Kelly, and Yee (2001) identify four key benefits of case study applications for deep and elaborative accounting learning. First, case studies allow students to make meaningful connections with the outside world, thereby stimulating students' interest and enthusiasm for accounting. Making connections with the outside world also helps learners to become aware of the complexities of real-world decision making, including ethical and moral considerations, and to learn how to operate within this frame. Developing an ethical framework of analysis is of particular benefit for forensic accounting, a profession in which ethical conduct is of paramount importance.

Second, case studies promote active learning. They require the application of knowledge and skills to new situations and encourage the exercise of judgement and the consideration of multiple dimensions including financial, social, and political aspects of problem situations. All this can lead to improving analytical and

soft skills and to enhancing logical reasoning and professional judgment. Third, case studies promote communication and interpersonal skills by providing opportunities for active discussion, debate, and group work. Fourth, “the application and resolution of case problems can provide a very practical demonstration of the importance of a sound underlying knowledge of accounting procedures, placing ‘technical’ accounting learning in an appropriate context” (p. 45). Furthermore, the multiple dimensions of case studies provide an ideal medium for addressing the multidisciplinary nature of the forensic accounting profession (Italia, 2012; Kumari Tiwari & Debnath, 2017) by linking accounting with other disciplines such as law, IT, and criminology. The benefits of case study applications for deep and elaborative accounting learning are summarised in Table 8.4 below.

Table 8.4. The benefits of case study applications for deep and elaborative [forensic] accounting learning

Benefits of case studies	Allow/ encourage [forensic] accounting students to:
Making connection with the outside world	Connect to their own interests. Become aware of the complexities of real-world decision making Consider the ethical and moral aspects of problem situations.
Promoting active learning	Deal with contemporary issues and apply knowledge and skills to new and unique situations. Apply judgement and analytical and logical reasoning. Consider other dimensions of problems (for example, social, environmental, and political) in addition to financial aspects.
Promoting interpersonal skills	Discuss and debate. Present and defence positions and conclusions. Consider views of others and alternative perspectives.
Placing technical accounting procedures in context	Move the focus from procedures and practices to concepts and issues. Critique conventional practices. Linkage of accounting and other disciplines.

Source: adapted from Boyce et al. (2001, p. 46)

Furthermore, several participants suggested that a period of work placement or internship should be part of the forensic accounting programme. They perceived the great value of integrating work placement into the forensic accounting courses. Waseem, for example, argued that work placements foster the development of a number of employability skills such as communication, decision making, and information technology more effectively than academic study does. Waseem believed that work placements also familiarise students with the business world and allow them to gain ‘real-life’ experience and build connections with potential

employers. This finding is in line with the extant literature (e.g., Abeysekera, 2006; Paisey & Paisey, 2010; Surridge, 2009) that underlines the importance of integrating work experience into the accounting higher education curriculum.

However, several academics were sceptical about the possibility of arranging suitable accounting placements for forensic accounting students, mainly due to the confidential nature of most forensic accounting and auditing work. For instance, Jawad, an owner of an auditing firm, explained that accounting and audit documents usually contain sensitive client information. Jawad believed that taking internship students would put his company at risk of having confidential information viewed by trainers, which might, consequently, lead to a loss of clients' trust and business, as the following comment demonstrates:

Our work is sensitive; this is the problem. We can't take students to teach or train them (...). It is difficult for us [to take internship students], because we keep clients' secrets. (Jawad)

Moreover, several participants raised concerns that, while companies often have no interest in offering paid internships, the majority of students in Jordan cannot afford to do unpaid internships. Consequently, according to Hamza and Yahya, students are not committed to the internship programme, as the following comments illustrate:

It comes by practice. This course is practical. For example, you should go and attend in audit firms and they give you a certificate, and they should be approved by the university. And you should attend and practice, not to attend as a matter of formality. (Hamza)

You know that internship or work experience is a compulsory part of the accounting programme in a couple of Jordanian universities. Unfortunately, lots of students don't do any work and they ask friends or relatives for fake work experience and references. This is not because they are not good students, but simply they can't afford to do unpaid jobs and they don't see much value in it. (Yahya)

This concern was also highlighted by Blackwell, Bowes, Harvey, Hesketh, and Knight (2001) who note that for a work experience placement "to be taken seriously it needs to be accredited, either towards the programme award or as a separate award of the institution or of an external body". Blackwell et al. (2001) go on to

argue that stakeholders, including universities and employers, need to investigate what factors influence students' views of internships and to work collaboratively to arrange meaningful and affordable work experience placements. This argument is consistent with earlier discussion in section 6.4, where participants highlighted the key role that academic-industry collaboration might play in overcoming socioeconomic challenges facing forensic accounting education in Jordan.

On the other hand, Hasan perceived students' presentations as one of the most effective methods to promote engagement in class, while also helping students to develop the skills required for forensic accountants. Presentations enhance critical thinking skills, as during the preparation stage students will be encouraged to critically read the material in order to be able to present their ideas in a logical way and to support their arguments (Lammers & Murphy, 2002). Presentations also promote students' confidence and help them gain communication and presentation skills, as Hasan explains in the following extract:

...look, what I do, I try my best to have the students interact with me in class. That is the case, because I have very smart students who don't interact; they don't like to interact but they are very smart...I force them to do a project, and actually the project I force them [to do] is four projects, basically you need to research, you have to write a paper, and most important, you have to come in front of me in class, and explain what happens, and why did that happen...they do their own research, their own paper and their own slides, their own PowerPoint, and get up in front of everybody. (Hasan)

Several participants highlighted the importance of engaging professional practitioners and forensic accounting experts in the forensic accounting education process either as guest speakers or visiting lecturers. Fadi, for example, argued that exposing students to real-world forensic accounting cases from the position of a practitioner offers a new perspective on the subject that is not available from a regular class. According to Fadi, allowing practitioners to share their practical experiences and to interact with students has the potential to increase students' interest in forensic accounting and enhance their learning, as the following comment shows:

Teaching this topic [forensic accounting] should not be confined to academics. Other parties should be involved as well, including: the private sector; the Jordanian Association of Certified Public Accountants; the Jordanian Association of Management Accountants; the Companies Control Department, which has contacts with the Ministry of Industry and Trade; the Chamber of commerce; and, many other departments in this country. Let me give you a simple example: who used to teach the taxation paper [at the university]? It used to be taught by experts from the Income [and Sales] Tax Department, such as Mr. Muhammad Ali³⁴. I remember him, he used to teach the taxation paper while he was also in his job at the [Income and Sales] Tax Department. Thus, you should not make it limited to academics. Although they [academics] are very important and they are the backbone of the [teaching] process, these [forensic accounting] topics need to be incorporated with practical experiences. (Fadi)

This study suggests that the practical nature of forensic accounting makes academic-practice partnerships more necessary than they are in other disciplines (Heitger & Heitger, 2008; West Virginia University, 2007). Guest speakers and visiting lecturers can help students to explore possible, future career paths and professional development opportunities in forensic accounting. Furthermore, in addition to lecturing, guest speakers and visiting lecturers should be encouraged to provide feedback and input on the forensic accounting curriculum. Khalil, among others, believed that this involvement would lead to a better integration of forensic accounting practice into the curriculum, as the following comment illustrates:

Professionals, of course, should be visiting universities, should give lectures at universities and education. They would clarify to people what career paths are open to them [forensic accountants]. They would raise awareness among students, and also help modify the curriculum to make it more relevant to the world of work. (Khalil)

The value that guest speakers can bring to the forensic accounting classroom was highlighted by Heitger and Heitger (2008) who, however, noted that the success of external professional presentations will depend on choosing the right speaker and content. Heitger and Heitger (2008) explain that

A steady parade of different forensic professionals as presenters is not conducive to achieving the student experiences goals. Instructors

³⁴ Pseudonym.

should choose wisely from the array of possible class presenters. Pick only those professionals who meet your specific class goals and sequence them so that other components of the class are not compromised (p. 570).

Furthermore, the outcome of a successful professional presentation should go beyond supporting students' learning to providing them with early networking opportunities and real insight into the forensic accounting industry (Heitger & Heitger, 2008; West Virginia University, 2007).

8.4.1 Learning resources.

Participants perceived textbooks, case studies, professional reports and websites, as well as the relevant Jordanian laws and regulations as the most appropriate and practical learning resources when teaching forensic accounting. However, rather than making specific recommendations on textbooks, case studies or other learning resources, they preferred to provide what may be considered as general guidelines for the selection of forensic accounting learning resources. A few participants made it clear that their 'modest exposure' to the 'academic side' of forensic accounting did not allow them to make specific recommendations on learning resources. Others argued that the continuously evolving forensic accounting literature makes it impractical to make specific recommendations on learning resources, as keeping up to date with new research and developments requires frequent updating of the learning resources used (Ally, 2004; Howieson, 2003). Hence, Adam, among others, suggested that forensic accounting instructors and curriculum developers in Jordan should use "benchmarking" against other forensic accounting programmes at the leading universities in order to remain informed and up to date with forensic accounting developments and literature, as the following excerpt shows:

I really think we need to benchmark against the best that have been used worldwide. (Adam)

As discussed in chapter 6, participants viewed the use of English as the only medium of instruction at the departments of accounting at the majority of Jordanian universities as a significant barrier to learning. Nonetheless, most participants did not support the Arabisation of accounting curricula (see section 6.4 for details). The

use of a mixture of Arabic and English in lectures and the use of supplementary Arabic learning resources were suggested, however, as two alternative solutions. Participants had a similar view on the use of English as a medium of instruction for forensic accounting education, as the following comment illustrates:

We have been always in Jordan working according to the international standards, but we teach the American standards! I don't like Arabic books at all, because they either are either full of mistakes, or not up to date, or prosaic. I am with bringing foreign books because they are developed in this [forensic accounting] field. From my point of view, if you would teach in Arabic here, how would the student pursue his education journey after graduation? No way. Now you produce an Arabic book for tertiary education purposes, but if I want to study other subjects after graduation, such as management accounting and audit, who would translate or Arabise this for me? This is an important point, that is, after university. From my point of view, some courses such as the forensic accounting principles could be taken as they are from foreign countries. After that, professors at the department can prepare another course [in Arabic] that talks about the reality of forensic accounting in Jordan. (Fadi)

Furthermore, as discussed in the literature review, accounting textbooks used at Jordanian universities have often been branded as 'Western imported, irrelevant' and 'out-dated' learning resources. The participants in this study expressed similar views about the accounting textbooks used at Jordanian universities. This study anticipates that forensic accounting textbooks would face similar criticism, considering the lack of relevant forensic accounting textbooks and learning resources in Jordan and the Arab World (see section 6.4). Hence, while textbooks may play an important role in forensic accounting education, they should be integrated with and supported by relevant learning resources such as local case studies and laws and regulations (Mohamed & Lashine, 2003).

As discussed earlier, case studies were the most preferred instructional method of teaching forensic accounting. Eisa suggested that actual, archived and on-going cases before the Jordanian courts and oversight agencies create a wealth of relevant resources to teach forensic accounting, as the following comment shows:

Cases are available at courts. Cases are available at the Chamber of Commerce, at the Anticorruption Commission, at other commissions, published and publicly available [cases], and the Securities

Commission. Many cases are available; I mean you can get it in many ways. (Eisa)

Yasin suggested that case studies can be either local or global cases and can be offered in a range of formats from a brief story within the lecture (storytelling) to a case assignment, as indicated in the following comment:

Classroom discussions are always the best. A case would be presented to be discussed during the lecture, or maybe the discussion can be postponed to the following lecture so everyone can read the case study to find three or four pieces of information to be discussed. (Yasin)

Finally, several participants suggested that in teaching forensic accounting instructors should make use of professional accounting exam materials such as those of the CFE and CIA.³⁵ Participants argued that professional exam materials are often updated to reflect the changes to the accounting standards and environment and professional requirements, are skill-based, and make outstanding use of case studies and practical examples. Thus, the participants expected the use of professional exam materials to provide practical insight into the forensic accounting topics and prepare students for success in the professional environment. The following comments illustrate this position:

I recommend the materials of the American Professional Certifications. This is because they are updated frequently, and they rely on practical examples to convey the ideas. The materials of the Certified Internal Auditor Certificate have even been translated into Arabic, I may recommend them. (Jawad)

The first thing from my point of view, if you want the student to work in a right way and be involved with you, for example the American university in Beirut, the accounting student there will be ready to sit the CPA straightaway once he has graduated. The same thing when you teach forensic accounting. You should help the student to satisfy this desire to be certified, not only academically, but professionally as well. (Fadi)

³⁵ CFE and CIA are the Certified Fraud Examiner and Certified Internal Auditor examinations.

It is worth mentioning that while no previous study had made specific recommendations of learning resources for teaching forensic accounting, West Virginia University (2007) provided a list of primary references identified and utilised while developing their 'guide for education and training in fraud and forensic accounting'. This list of references and potential learning resources includes textbooks and instruction materials, journals devoted to fraud and forensic accounting, case studies, and professional bodies, as presented in Appendix 12.

8.5 Assessment Strategies and Practices

As explained earlier, the majority of accounting departments at Jordanian universities rely on written exams as the sole assessment method (see sections 2.6 and 6.4). Although exams grades might be good indicators of students' academic achievement, the participants believed that when they are solely relied upon and not combined with other assessment methods they fail to accurately measure the student learning outcomes of the curriculum (Beetham & Sharpe, 2013; Hirsch, 2016; Phan, 2015). Hence, participants argued that employers no longer trust degree results and tend to consider preemployment cognitive ability, job knowledge, personality, and IQ tests as more reliable indicators. Fadi and Adam's comments illustrate this position:

Clearly, we do not trust the university grades. And this is the reason that we hold internal exams. At our institution, we hold internal exam; we interview five or six, and we identify who to employ. Big institutions, and others, in the country have IQ tests. Big accounting firms, frankly, do not pay attention to the university qualification at all. (Fadi)

So I think if we provide our students with training so they can have these outcomes, then I think it would be important to the employer because they will come back at the end and say this person has received an 'A' in a particular subject, but are they able to work a real problem? Are they able to think critically? Are they able to read between the lines? Are they able to have some ethical understanding of the situation? (Adam)

While accounting practices have changed dramatically in the last 2 decades to meet the new market demands brought on by changes in business and technology (Horniachek, 2008; McPeak et al., 2012), accounting education continues to be

delivered and assessed the way it has been for the past 20 years (Blankley et al., 2017). This study finds that accounting practitioners and employers in Jordan view the outcomes of accounting education less positively than do accounting academics. This finding is not surprising considering that earlier studies (e.g., Howieson, 2003; Low et al., 2013; Sikka et al., 2007) have provided ample warning that accounting education must be dramatically modified to maintain relevancy, to add value to learners and employers, and to meet ever-changing stakeholder expectations. The gap between what employers need from accounting education and what it receives might be particularly large in developing countries, including Jordan (see sections 2.6 and 6.4 for a related discussion), where accounting education reforms are hindered by lack of funds and poor academic governance (Hopper et al., 2017).

Instead of the traditional reliance on written exams, participants believed that multiple assessment methods should be used to assess forensic accounting students' learning outcomes. While a range of assessment methods including quizzes, course assignments, essays, projects, and presentations were perceived as relevant to the forensic accounting programme, performance-based assessments were judged to be the most useful methods. Jawad and Ammar, for example, saw performance-based assessments as more "authentic" measures of forensic accounting students' learning compared to the traditional examination methods. Jawad and Ammar explained that due to the practical nature of forensic accounting, an effective assessment of forensic accounting students should be largely performance-based to allow students to demonstrate their ability to apply the knowledge and skills learned in class in "real-world situations".

I need to know the level of the student in the work field, not only in theory. Therefore, I suggest that in addition to exams, he should be assessed through an oral exam or an interview. His knowledge abilities as well as his communication abilities will be assessed through that. Or by putting him in a real scenario by giving him financial statements and information about a company that has fraud, and after that assessing how he does deal with the issue and the fraud. I usually do this in my firm. (Jawad)

Now the skills are central for forensic accounting or auditing. I mean, what skills does he have so he can apply the knowledge that he has? In the sense that if he has achieved excellence [at school] but he does not

have the skills that allow him to apply his knowledge, how would I benefit from him? (Ammar)

Several forms of performance-based assessment were suggested by participants. Performance-based assessments involve engaging in tasks that can range from participation in an oral examination to the demonstration of proficiency in using software, a technique or a set of skills in simulated or real-world situations (Luongo-Orlando, 2003; Wiggins, 2011). In this sense, the use of case studies as an assessment method may be considered as a form of performance-based assessment.

Case studies and scenarios are commonly used as both teaching and assessment methods. Participants perceived case studies and scenarios as a powerful assessment method. As discussed earlier, using case studies and scenarios is seen as a way to develop learners' employable skills and to allow them to contextualise the theoretical concepts they have learned in class and, therefore, to make their learning more relevant to the real-world problems related to their environment (Beetham & Sharpe, 2013; Hirsch, 2016; Phan, 2015). In addition, several participants argued that case and scenario-based assessment provides a good measure of students' achievement as it typically focuses on the application of knowledge and skills that draw upon broad principles rather than the recall of knowledge, as the following comment illustrates:

It doesn't mean that if you give me the definition of financial crime or fraud, it doesn't mean that you can detect it. You know, so I think one of the issues that the professor, if I am in a position to assess students, I will give them cases and then I will ask them to write the report to define what is the system that should be used, what are the procedures, what type of issues can you think of in this case, and what do you recommend. (Hasan)

Case studies can be introduced into the forensic accounting assessment in both the form of an exam and an assignment (Boyce et al., 2001). The instructor can provide students with real-world financial statements and documents in a timed exam and ask them to take a critical look at them, identify any issues, and decide on an appropriate course of action. Case study assignments, on the other hand, involve in-depth analysis and investigation over a relatively extended period, which allows

students to collect and present detailed information about a case or situation (Beetham & Sharpe, 2013; Hirsch, 2016).

8.6 Curriculum Development Strategies

As discussed earlier, several types of activity go under the title of curriculum development. Curriculum development involves the formulation of learning outcomes and the selection and organisation of content, learning experiences, and assessment (Taba, 1962). Curriculum development also involves helping instructors to be prepared to implement the developed curriculum (Carl, 2009; Phan, 2015). Curriculum development is an ongoing process (Tanner & Tanner, 1980) and, thus, the continuous reviewing, evaluation, and revision of the curriculum form part of it (Brady & Kennedy, 2013; Taba, 1962).

As the development of a forensic accounting curriculum is a complex process (West Virginia University, 2007), the participants explained that it requires support across different levels of the education system and involvement of different parties at the national level. In line with Taba (1962), this study finds that the curriculum development process usually begins with an instructor who is internally motivated to make a change. Within his/her organisation, this instructor will initiate the process, which, in turn, will act as a chief vehicle for organising and administering the work of curriculum development with the interested parties. These parties, as Faris explained, may include the private sector, professional bodies, oversight agencies, and civil society, as the following comment shows:

Look, I mean the responsibility is always shared between individuals, societies, officials, groups, and so on. You, for example, brother Ahmed, as you are studying this [forensic accounting] and you have specialised in it. On your return to Jordan as a specialist, you will have a big responsibility to convey your experience and what you have been involved in to your country. It is your responsibility to try to raise awareness about this new science also by contacting the deans of the schools.... Contacting the government organisations responsible for the control, [such as] the Audit Bureau, may also be useful. (Faris)

Faris's statement may be seen as a call for a shift in the responsibility for forensic accounting curriculum development away from curriculum experts towards a

participatory process that allows input from a wide participation base. That is not, perhaps, to say that all forensic accounting education stakeholders should have a say in the objectives and design of the forensic accounting curriculum. Rather, it indicates that the greater the range of stakeholders involved in the curriculum development process, in the wider sense, the better. Support for this argument can be found in the extant literature, where Phan (2015, p. 282) notes, involving a wider range of stakeholders, including employers, current students and graduates, teaching staff, and administrators, in the curriculum development process “allows their voices to be raised and heard; and their knowledge and expertise to be shared and used. Thus, knowledge and skills of the researched or grassroots communities are employed, and they are involved as full partners of the process”. This participation may involve actions that may not be devoted directly to the design of the curriculum; rather, it may merely develop an awareness of the importance of forensic accounting. For example, the forensic accounting curriculum development process may involve, as Khalil explained, researchers and private sector institutions conducting forensic accounting-related studies, practitioners promoting the field by giving talks or conducting seminars or workshops, and people familiarising themselves with the concept and exploring the opportunities within this area:

Of course, of course raising awareness, the writers, people, economists and the firms should write. Doing studies, private firms should do studies. The whole community needs to get involved in the [curriculum] change not only universities. Also, of course, giving lectures at universities; professionals should visit universities talking about career paths and education. People should understand what the career paths [for forensic accountants] are after graduation. We need to raise awareness so people understand how this change in curriculum [to include forensic accounting topics] will affect their plans for employment. (Khalil)

Several participants perceived a significant role for practitioners specifically in the development as well as the implementation of the forensic accounting curriculum. Hasan and Jawad, for example, see the involvement of practitioners in teaching forensic accounting as a way to address the shortage of academics with sufficient forensic accounting knowledge and experience. In addition, Hasan and Jawad expressed their concern about the ability of academics with “no or little” forensic accounting practical experience to develop and implement a forensic accounting

curriculum without the assistance of professional practitioners, as the following comments demonstrate:

You have to have those people who know, ‘they know’, who got the education from the Western world or from the practice as a forensic auditor, in order to implement it properly. You cannot just get the book and give it to an accounting professor, and tell him this is a book, teach it. I don’t think it works like that. (Hasan)

The auditors’ and academics’ experiences should be mixed or integrated to bridge the gap between the practical and theoretical sides. I mean the auditor should provide academic efforts, and the academic should work as an auditor [to get] some necessary experiences and knowledge. (Jawad)

Hamid also raised concerns about the capability of academics in Jordan to develop and implement the forensic accounting curriculum. Hence, he asserted that the development of the forensic accounting curriculum should be accompanied by academic staff development and training. Hamid believed that education providers have a responsibility to encourage academics to carry out research and develop their abilities and competencies in forensic accounting, as the following quote shows:

Usually professors teaching in Jordan graduated from Western universities. Now they are available [to teach in Jordan] and this is not difficult. However, you need to find parties [education providers] that direct them to do research in these [forensic accounting] topics. Not to let the professor travel to study forensic accounting while being not sure whether he will find a job in his specialisation or not when he returns. (Hamid)

This view is in line with the discussion in section 6.4 about the responsibility of education providers in directing, motivating, and preparing their academic staff to teach forensic accounting. While the interest in developing the accounting curriculum to include emerging topics such as forensic accounting may begin with the individual instructor, universities have the responsibility to maintain the motivation and commitment needed to assure productivity (Taba, 1962; West Virginia University, 2007). The universities’ responsibilities in this regard involve considering curriculum development as a priority, releasing time for academic staff to participate in curriculum development, and allocating appropriate funds for

academic staff research, training, and development (Phan, 2015).

8.7 Summary

Based on Taba's (1962) model of curriculum development (see sections 3.3 and 5.5), this chapter offers an integrated framework for the development of an educational forensic accounting programme that best suits the Jordanian context. This chapter presented and interpreted the study participants' perceptions on the learning outcomes and level of offering; content selection and organisation; instructional strategies; assessment methods and practices; and, curriculum development strategies for a forensic accounting programme. It did so in the light of the Jordanian contextual background discussed in chapter 2; theories and literature cited in chapters 3 and 4; and, the exploration of incentives and barriers as well as reforms necessary to develop forensic accounting practice and education in Jordan discussed in chapters 6 and 7 (see Figure 5.1 for the design process of the framework developed in this research).

When asked about what they perceive as the advantages and the barriers and disadvantages of integrating forensic accounting into the accounting curriculum, as opposed to teaching forensic accounting as a separate programme in Jordanian universities, most participants did not rule out any of the options. However, they did perceive integrating forensic accounting into the accounting curriculum as a preliminary stage that paves the way to higher levels of offering and lifelong learning. Likewise, when participants were asked at which level in a tertiary institution a forensic accounting course should be offered, most believed that it should, eventually, be offered at both the undergraduate and postgraduate levels, as well as through nondegree courses. Participants, however, focused on the significance of the gradual offering of forensic accounting education rather than on preferring one option over the other.

Those who participated in this study perceive forensic accounting education as a hierarchical structure that represents four different levels of learning, namely the familiarity level, the comprehension level, the generalist practice level, and the specialist practice level. Each level of offering yields unique outcomes and targets,

and serves a different group of stakeholders. For example, the major learning outcome of level three, the generalist practice level, is to prepare entry-level practitioners by offering a stand-alone undergraduate programme. However, the major learning outcome at level four, the specialist practice level, is to prepare specialist practitioners by offering a stand-alone postgraduate programme or [a] nondegree professional training course/s to those who seek to acquire greater knowledge and proficiency in a specific area of forensic accounting such as money laundering, digital forensics, or litigation support.

Whilst providing a detailed description of the learning outcomes for each forensic accounting course would exceed the scope of this study, the general learning outcomes for each of the four levels of offering illustrated in Table 8.2 can be summarised as follows. At level one, learners should be able to: define forensic accounting and describe the differences between it and auditing; explain the general role and functions of forensic accounting; define fraud and corruption; describe the fraud triangle (elements of fraud i.e., pressure, opportunity, and rationalisation); explain the common types of fraud and corruption schemes and their implications; and, explain some of the major fraud examination strategies and techniques.

At level two, learners should be able to: explain basic and advanced concepts of fraud examination; explain the major types of fraud schemes and their implications; identify and analyse ethical issues and potentially fraudulent situations; explain the major fraud examination strategies and techniques; describe the role of corporate governance mechanisms in fraud examination; and, explain how to obtain and analyse evidence and how it can be used in court.

At level three, learners should be able to: evaluate the various types of fraud and corruption schemes and their implications, including cyber fraud, tax fraud, and identity fraud; apply the use of the various strategies and techniques used in fraud examination, including analytical procedures and inquiry and interrogation methods; apply the use of computer software and Internet in fraud examination; apply knowledge of criminal and commercial law and regulations to engage in litigation support consulting and expert witnessing; apply knowledge of behavioural sciences and criminology in the context of fraud examination; evaluate

the impact of the religious, cultural, legal, and business environment on perpetrators and organisations, and apply critical thinking and problem-solving skills within a professional context; apply professional standards and ethical principles in decision making in the context of fraud examination; critique the role of the major oversight agencies in Jordan in fighting fraud and corruption; and, communicate findings in written and oral form suitable for a court of law. Learners at level four should be able to meet the learning outcomes that equate to those at levels one and two in addition to selected learning outcomes from level three relevant to a particular, chosen career path.

The content selection and organisation and instructional strategies should reflect the predetermined learning outcomes. While this is not to suggest that learning outcomes translate themselves automatically into content and instructional strategies (Taba, 1962), learning outcomes do provide an orientation to the main emphasis in a course or programme and the appropriate instructional strategies.

Participants' suggestions on the knowledge and skills that should make up the content of forensic accounting education can be classified into five learning areas or categories. The first covers prerequisite introductory accounting and auditing courses or topics. The second relates to fraud examination and consists of topics that address the forensic accounting concepts, techniques, strategies, fundamentals of fraud and corruption, and fraud examination from a social and behavioural perspective. The third area encompasses forensic accounting in the digital environment, cybercrime, and technology-based fraud solutions. The fourth covers ethics from a philosophical, cultural, and religious perspective, while the fifth area relates to litigation support and advisory services which involve corporate, criminal, and commercial law, legal and legislative knowledge in the key industries and fields, and litigation support and expert testimony techniques.

Among the most frequently mentioned skills identified by participants as 'of great significance' were communication skills, analytical skills, critical observation, information technology capabilities, smartness, creativity, objectivity, and scepticism. Other skills which were mentioned less frequently, but which are

nevertheless considered as important, include researching for information, interviewing skills, inquisitiveness, and logical reasoning.

This chapter also provided a discussion of the participants' suggestions on learning and teaching methods that might be used to achieve active and effective learning of forensic accounting subjects. The purpose of education is not just to make a student literate. Education is an empowering process that allows and guides students to develop their critical thinking and intellectual curiosity and contribute their unique ideas and abilities to society (Manning, 2013). However, it has been found that the traditional educational approach in which the teacher delivers the lecture content and the students listen to the lecture is of limited effectiveness in producing creative graduates with critical and analytical skills (Zavertnik, Huff, & Munro, 2010; Alkharusi, Kazem, & Al-Musawai, 2010). Recently in the higher education literature, much emphasis has been placed on the use of innovative teaching methods. These innovative teaching methods include: tutorials, simulations, role playing, and case studies on real and virtual work environments, and social media as well as various multimedia tools (Jaskyte, Taylor, & Smariga, 2009)

Participants believe that a major problem with accounting education in Jordan is the over-reliance on lecturing as a teaching method. Participants see a crucial need for a transition from the current lecture-style teaching approach towards a more student-centred mode of learning. Central to the student-centred approach is the recognition that learners have different abilities, experiences, and interests, and, therefore, have different learning preferences. Hence, placing learners at the centre of the learning process requires the incorporation of various instructional methods that encourage each student to engage in the learning process from his/her own perspective.

Furthermore, student-centred teaching focuses on the design of an interactive learning environment that encourages learners to take more responsibility for their own learning and prepares them to become lifelong learners. Lifelong learning is essential if forensic accountants are to be able to stay abreast of updates in technology and changes to legislation and regulations and is important for their professional development. In addition, student-centred teaching shifts the focus

from memorisation and repetition to the acquisition of employability skills that enable learners to utilise the content of their curriculum during employment. Student-centred teaching, therefore, enhances employability.

Participants suggested various ideas and interactive teaching techniques that could foster a more interactive and engaging learning atmosphere for both instructors and learners such as class discussion, presentations by learners, individual or class projects, and case studies. “Although these techniques are clearly different from the traditional lecture method, active learning techniques can be used in conjunction with, rather than replacing, lectures as a way of increasing student involvement in the classroom” (Blankley et al., 2017, p. 104).

Case studies were seen as the best teaching and assessment method by most participants. Case studies can be either real-life situations or fictitious scenarios, local or global, and their sources may include books, journals, and publications and reports of oversight agencies and audit firms. Case studies were thought to provide learners with the opportunity to learn in real-life settings, help them to realise the links between their academic studies and the workplace, thus leading to greater appreciation of, and motivation for, their academic studies. Moreover, participants greatly valued work placements. Work placements were seen to offer learners an opportunity to combine academic study with practical experience and to develop skills needed by employers, and, thus, enhance their employability. Due to the confidential nature of most forensic accounting and auditing work, schools must ensure that, when assigned their placement, candidates are informed of their responsibilities concerning confidentiality. Responsibilities and expectations concerning confidentiality could be communicated to candidates through learning contracts and confidentiality agreements with host organisations.

Case studies and learners’ presentations and projects, along with other interactive teaching methods, can also serve as assessment methods. Hence, the introduction and application of more interactive teaching methods often has the potential to stimulate and facilitate a parallel shift toward more interactive, relevant, and consistent assessment methods. Performance-based assessments and case studies

were considered to be the most useful methods for assessing forensic accounting students' learning outcomes.

Forensic accounting curriculum development is a complex process that requires innovation, and it is one that involves continuous improvement and evaluation. The forensic accounting curriculum should reflect the needs of the wide range of forensic accounting education and services stakeholders in Jordan and be devoted to producing competent practitioners who understand the concepts of forensic accounting and demonstrate the ability to apply them in the real world. Hence, including wide and active stakeholder participation should be a central strategy in the development of a forensic accounting curriculum.

The next chapter provides summaries, recommendations, and suggestions for further research and concludes this research with a personal reflection.

Chapter 9

Conclusions, Implications, and Further Research

9.1 Introduction

Forensic accounting is a relatively new and developing field in terms of its research, education, and practice. Major financial reforms and increased legal and regulatory requirements following corporate fraud scandals have led to significant growth in the demand for forensic accounting (Matson, 2016). This growth has created an educational opportunity for institutions that currently provide related courses and programmes. However, a gap appears to exist between the demand and supply of forensic accountants through educational institutions. This gap may be particularly wide in developing countries, including Jordan, where fraud and corruption are rampant, the rule of law is poor, and anticorruption policies are ineffective (Susser, 2013).

One major factor that brought citizens into the streets in the Arab Spring countries (see section 2.3), including Jordan, back in 2011 was the widespread fraud and corruption (Anderson, 2011; Susser, 2013). Uprisings pushed the issues of fairness, transparency, responsibility, and accountability to the forefront and contributed to the call for forensic accounting in Jordan (Neimat, 2012; Ishtaiwi, 2012). Despite the establishment of several anticorruption reforms, initiatives, and agencies in the last decade, the perception by experts (Transparency International, 2016) and the general public (Schenker, 2015) is that fraud and corruption in Jordan still seem to be increasing and threatening the socioeconomic development of the country. Fraud and corruption problems in developing countries, including Jordan, cannot be solved simply by replicating anticorruption strategies, importing forensic accounting curricula, and applying forensic accounting instruments that work in developed countries (Hors, 2000). Anticorruption strategies and forensic accounting can be seen as technical elements in a complex process of change that involves political, economic, regulatory, and social factors. It is, thus, for each country concerned to draw up its own unique strategies and develop its own

education programmes to suit its own requirements and contexts (Wallace & Pendlebury, 2014).

Through the exploration, assessment, and characterisation of the current state of forensic accounting practice and education in Jordan, this research has sought to develop a framework for a forensic accounting education programme which is compatible with Jordan's unique context. The research aimed to answer the following questions:

1. What incentives and barriers surround forensic accounting education in Jordan?
 - What is the current state of forensic accounting practice and education in Jordan?
2. What reforms are necessary to develop forensic accounting practice and education in Jordan?
3. What should the framework for forensic accounting education in Jordan be?

In seeking to answer these questions, the research drew upon both primary and secondary data. Forty participants representing accounting academics and practitioners from the private and public sector in Jordan, lawyers and legal experts, and Islamic theologians were interviewed, and documents relevant to accounting and forensic accounting curricula, along with the websites and publications of educational intuitions, financial services firms, professional bodies, and oversight agencies, were analysed. Thematic analysis using NVivo was employed to analyse the data (Welsh, 2002; Woods, Paulus, Atkins, & Macklin, 2016).

The purpose of this chapter is to offer a comprehensive summary of this research. In addition to outlining major conclusions, this chapter presents the research's implications and recommendations arising from this study and identifies its limitations. The chapter also looks beyond the current study by offering suggestions and directions for further research. The final section presents a personal reflection on researching and writing this thesis.

9.2 Major Conclusions

A number of key conclusions can be drawn from answering the research questions outlined above. These conclusions are presented in the following subsections.

9.2.1 Incentives and barriers surrounding forensic accounting education in Jordan.

There is little argument that forensic accountants are needed to manage the escalating complexity of the business environment (Alkubaisi, 2016; Amernic & Craig, 2004; Kramer et al., 2017; Rezaee et al., 2004; Seda & Kramer, 2014; Smith & Crumbley, 2009). In Jordan, both the not-for-profit sector, including law enforcement and oversight agencies, and the private sector, including audit firms and insurance companies, are grappling with a shortage of professionals able to deal with forensic accounting issues. As threats arising from fraud and corruption grow (Transparency International, 2016; Schenker, 2015), the government has inadequate resources to provide forensic accounting support for their own agencies, let alone for businesses and citizens.

The participants in this study perceived an increasing demand for and interest in forensic accounting education. This finding is consistent with the extant literature (e.g., Carpenter, Durtschi, & Gaynor, 2011; Daniels et al., 2013; Domino, Giordano, & Webinger, 2017; Rezaee et al., 2004) which indicate strong support for inclusion of forensic accounting concepts and applications in the accounting curriculum at both undergraduate and graduate levels. The participants believed that forensic accounting education is important for the following three key reasons: first, enhancing graduates' competencies to meet market needs; second, re-establishing the accounting education connection with the political and social world; and, third, improving graduates' ethical decision making.

The majority of participants preferred either the integration of forensic accounting education into the core accounting curriculum or offering a separate forensic accounting course. The rationale for suggesting these two approaches is that basic forensic accounting knowledge and skills are needed by all entry-level accountants,

regardless of their chosen career path, in order that they are able to deal with the growing complexities of the business environment (see section 6.3). Although these two approaches are viewed as preferred methods of covering forensic accounting education in the accounting curricula, each has its own obstacles. For example, adding [a] new forensic accounting course/s or topic/s to the already saturated curriculum can overburden students and faculty alike and create a challenge for many schools in deciding what other course or topics should be dropped from the curriculum in order to cover forensic accounting topics. Furthermore, many academics may be unwilling, or reluctant, to add forensic accounting topics to their courses because of their own lack of familiarity and comfort with this ‘relatively new’ topic. This study suggests that Jordanian departments of accounting review their curriculum frameworks and aims and assess their own drivers, capabilities, and impediments in deciding how forensic accounting education can be delivered.

While there was no strong preference toward offering a forensic accounting course at either the undergraduate or postgraduate level, the participants disagreed with offering forensic accounting education as a stand-alone degree programme at the undergraduate level. Critics of offering a stand-alone undergraduate forensic accounting programme questioned the ability of undergraduate students to deal with ‘a specialist field of knowledge and professional practice’ without a solid base of knowledge in accounting, auditing, and business. Support for this argument can be found in the extant literature, where Albrecht et al. (2016) and Kumari Tiwari and Debnath (2017) explain that forensic accounting, by its very nature, requires a deep understanding not just of accounting, but of the anatomy of fraud, IT, and an adequate legal knowledge as well. Hence, producing ‘ready-for-work’ forensic accountants is a multiyear process (West Virginia University, 2007), as it takes years of experience to develop maturity in the requisite knowledge and skills to perform many of the complex forensic accounting functions (Albrecht et al., 2016; Davis et al., 2010; Rezaee et al., 2004). The typical forensic accounting tasks include a mix of investigation, analysis, and reporting functions from collecting financial evidence, to investigating, analysing, and communicating the findings in the form of reports or visual aids to support trial evidence (Albrecht et al., 2016). Those particular participants, therefore, considered a bachelor’s degree in accounting to be a prerequisite for the study of fraud and forensic accounting.

Moreover, the participants referred to a number of education-related barriers such as the lack of enough qualified academics and the lack of relevant forensic accounting resources (see section 6.4) as barriers to offering a stand-alone undergraduate forensic accounting programme. This position, however, could be seen as context-driven rather than a generalisation, as overcoming these barriers would prepare the ground for conversations in the future around the reconsideration of offering a stand-alone undergraduate forensic accounting programme.

Those schools that decide to offer forensic accounting education will often start from ‘scratch’ in terms of both preparation of relevant forensic accounting learning resources as well as staffing development. This situation presents challenges in two directions. First, it is important to be able to prepare instructors to deal with teaching in an area such as forensic accounting that requires nontraditional teaching methods (Heitger & Heitger, 2008; West Virginia University, 2007). It is expected that many instructors might struggle to adjust to the use of technology and interactive teaching methods (Blankley et al., 2017).

In Jordan, most accounting departments adopt a traditional style of education that is based on too many lectures and which relies on textbooks as course drivers (Khader, 2009). Too much emphasis tends to be placed on rote memorisation and the test-for-content education model without preparing students to be innovative (see section 2.6). Accounting departments in Jordanian universities are often isolated from professional reality. Students are not encouraged to interact with business professionals or firms or to take a critical or an analytical approach towards a wide range of real-world problems. As a result, students become increasingly out of touch with the market demands (Al-Sawalqa & Obaidat, 2014).

At the University of Jordan and Yarmouk University, for example, there is minimal use of technology and innovative teaching methods in the accounting pedagogy. Assignments with real firms, case analysis, oral presentations, writing assignments, group work, role-playing, videos, and network services such as web access and social media are not part of the infrastructure that students and accounting departments use (for further details see sections 2.5 and 2.6). In addition, these two

universities do not offer or facilitate any kind of accounting internship (The University of Jordan, 2018; Yarmouk University, 2018). Such extremely traditional and theoretical accounting programmes in Jordan produce graduates with a narrow exposure to accounting techniques and problems in the real business world. Academics have, thus, to challenge their current teaching practices and develop new skills in terms of interactive and hands-on teaching and assessments.

Secondly, in addition to the need to develop new teaching and learning methods and skills, academic staff have to upskill and develop forensic accounting knowledge and skills. One of the challenges to forensic accounting education is the multidisciplinary nature of the field (Italia, 2012; Kumari Tiwari & Debnath, 2017), which, besides accounting and auditing, includes aspects of law, IT, and criminology. Hence, a thorough understanding of one or more of these aspects may be out of the area of expertise of those teaching the ‘accounting’ aspect of forensic accounting. Academics, thus, should strive to gain forensic accounting practitioner and employer partnerships and to develop networks for teaching, training/internship, and research opportunities. Academics need also to utilise the ‘limited’ research that has been published on forensic accounting education (Huber, 2012; Kumari Tiwari & Debnath, 2017; West Virginia University, 2007) to facilitate improved insights into how forensic accounting topics, courses, or programmes could possibly be structured and delivered to lead to the graduation of more competent accountants and forensic accountants who are able to manage the real-world risks and complexities (Imoniana et al. , 2013; Rezaee et al., 2004).

To conclude, the need for accountants with forensic accounting skills and competences continues to grow, sparking a growing concern about the mismatch between market needs and the education pipelines in Jordan (Alkubaisi, 2016). Looking forward, it is clear that accounting education providers have to adapt to the changing landscape of accounting education and stakeholder requirements (Howieson, 2003; Low et al., 2013; Sikka et al., 2007). There are a number of challenges to teaching forensic accounting in Jordan including the lack of enough qualified academics, the lack of relevant forensic accounting resources, and the students’ lack of interest in studying a new, potentially challenging topic. Nevertheless, forensic accounting is, as perceived by participants, a promising area

of accounting and the opportunities for research and education abound (Carpenter et al., 2011; Daniels, Ellis, & Gupta, 2013; Domino et al., 2017; Rezaee et al., 2004). Promoting, designing, and implementing forensic accounting educational programmes requires multilevel partnerships involving learners, education providers, practitioners from both the private and public sector, and the Jordanian Association of Certified Public Accountants.

9.2.2 Cultural, political, and economic challenges and major necessary reforms.

While this study stresses the role of culture and religion in shaping Jordanians' perceptions, behaviours, and actions, it does not underestimate the impact and role of a range of other factors, including the kingdom's social structure, political situation, and economic conditions. All of these factors together provide a deeper insight into Jordan's society. Here, this study claims that the role of culture and religion in Jordan can be viewed from two different angles: first, through an analysis of the Islamic theological texts and Jordan's cultural values and traditions; and, second, through an appreciation of the political, economic, and social influences in Jordan which continue to inform its social structures and religious practices.

Citing verses from the Qur'an and Sunnah that prohibit cheating, stealing, bribing, and other forms of corruption, several participants stressed the positive impact of Islam on legal and ethical behaviour (Abuznaid, 2009; Al-Qaradawi, 1999; Ramady, 2015; Rice, 1999; Zinkin & Williams, 2006). Others, however, highlighted a tension between the Islamic vision of ethics and that of secular systems. This tension is reflected in the gap between the citizens' ideas of morality, liberty, rights, responsibilities, fairness, and equality, on the one side, and the rules and regulations imposed by the state, on the other. For example, as the Qur'an vehemently forbids usury, citizens consider interest derived from usury [*riba*] to be a form of injustice, exploitation, and corruption. However, Jordan is not dissimilar to most modern economies where the regulation of their economies is intrinsically tied to interest rates.

In contrast to the state, banking and financial institutions in Jordan were quick to capture this growing trend in favour of Islamic banking, and to respond by either turning towards Islam-friendly models or opening windows for Islamic compliant transactions. According to the former finance minister Muhammad Abu Hammour and the director of the Association of Banks Adli Qandah, the Islamic banking industry in Jordan, which has 141 players and assets that stand at more than US\$8.4 billion, represents 20 per cent of total market share and this share is growing rapidly (Al-Mahdi, 2017). These businesses have realised that they cannot succeed if people perceive their policies and transactions to be inconsistent with their religious beliefs and cultural norms. In the same way, the state must consider the dominant religious beliefs and cultural norms in forming its policies, laws, and regulations.

The discussion above should not be understood as a call to enforce Islamic law as an official policy and as formal legislation, as such a move might be neither desirable nor practical (see section 2.3 for details about the role of Islam in the legal system and economic and political life in Jordan). However, it is necessary for the state to maintain, and regulate, a balanced connection between Islam and its policies and legislation. This connection can be achieved by taking the following three approaches. The first involves the implementation of Islamic principles and cultural norms that deal with protecting and promoting human rights and fundamental freedoms. This approach includes the right to equal access to public services, an adequate standard of living, equality before the law, and freedom of thought, expression, association, and the right to vote. Although they are not controversial, and are common within various Western constitutions and human rights documents and declarations, these rights are under continuous attack in Jordan. The second approach involves the development and reformation of the economic and regulatory environment, including the taxation, and the financing and investment system, to address the dynamic needs of Islamic-compliant instruments and financial solutions. The third involves the legitimisation of the state's policies and legislation with reference to the Islamic framework and cultural norms.

It is worth mentioning that the nature of the connection between religion and culture, on the one hand, and forensic accounting practice and education, on the other, may impact on Western decisions in supporting education in Arab Muslim countries

(Berger, 2006), including Jordan. As discussed earlier (see section 3.4), although fraud and corruption are perceived as problems by both Islam and the West, they differ substantially with regard to the definition of these problems and, thus, the tactics each recommends for their treatment. For example, Islamic philosophy considers fraud and corruption as moral problems that require social and religious reforms. By contrast, corruption is perceived as a problem of bad governance in the West that necessitates political and economic reforms (Markham, 2006; Persson et al., 2013). These contradictory views of what the problem is and what the necessary reforms are could present obstacles to Western funding of forensic accounting education in Jordan. There are no clear-cut solutions for this kind of contradictions. Nevertheless, careful and balanced incorporation of beliefs and cultural values in forensic accounting practice and education by the Jordanians and a positive engagement of Western donors may provide solutions (Berger, 2006).

It does not seem that the widespread rhetoric about the need to strengthen the role of public accountability in Jordan is being translated into practice (Sharp, 2013). A culture of nonaccountability is dominant in Jordan (Transparency International, 2016; Schenker, 2015). It starts from inside the Palace and spreads outwards to the country's public offices and private firms. Jordan's constitution (1952) gives the king the power to "ratify the laws, promulgate them and order the enactment of the regulations necessary for their implementation" (Article 31); the power to "declare war, make peace and conclude treaties and agreements" (Article 33); the power to "issue orders for the holding of elections to the House of Representatives", "convene the Parliament, inaugurate, adjourn, and prorogue it", "dissolve the House of Representatives", and "dissolve the Senate or relieve one of its members of the membership" (Article 34); the power to "appoint the Prime Minister, dismiss him and accept his resignation, and appoint the Ministers, dismiss them and accept their resignation upon the recommendation of the Prime Minister" (Article 35); and, the power to "appoint the members of the Senate and appoint the Speaker of the Senate from amongst them and accept their resignation" (Article 36). Nevertheless, the king "is immune from every liability and responsibility" (Article 30). This situation runs contrary to the principles of transparency and accountability, which require that citizens have the right to access government information, and that those in power are responsible to the citizens for their decisions and actions (Becker & El-

Said, 2013; Helfont & Helfont, 2012; Johnson, 2012; Ndou, 2004; Rose-Ackerman & Palifka, 2016; Yom, 2009).

Moreover, the ‘hegemony without accountability’ of the king over legislative, administrative, and executive power made possible by the constitution (Salameh & Ananzah, 2015; Wiktorowicz, 1999), along with the tribal mentality, or tribalism in Jordan that is based on the *wasta* concept (see section 7.4 for details), is the mechanism that often allows government officials and influential figures to ‘get off the hook’ (see section 7.2 for discussion and cases). Furthermore, the prominence of tribalism in Jordan’s electoral process produces ‘localised’ and ‘tribal’ governments and oversight agencies that serve their own interests rather than the greater well-being of society (see section 7.3).

The influence of tribalism argued above extends from the political system in Jordan to the economic and business environment (Brandstaetter et al., 2016; Schenker, 2015). The tribal mentality, the *wasta* culture, and tribe favouritism in Jordanian society are major obstacles to economic development and reform. Decisions made by public servants and the duration, complexity, and cost of administrative procedures depend very much on the power of the applicant’s *wasta* (influential people). Hence, the *wasta* and favouritism culture creates an unhealthy business environment that is characterised by a lack of efficiency and fairness.

The social, political, and economic challenges that Jordan faces have been exacerbated by the Syrian refugee crisis (see sections 2.2 and 2.4). Thus, efforts must be made in order to mitigate the implications of the increased pressure on the country’s social and economic resources. The high rates of poverty, inflation, and unemployment intensify the feelings of unfairness and frustration amongst citizens (see chapter 2) and have negative effects on efforts to combat fraud and corruption.

9.2.3 A framework for a forensic accounting education programme.

This study is the first to capture a diverse collection of literature and stakeholder perceptions and experiences and to distil them into a reflective and meaningful framework for forensic accounting education within a Jordanian context. The

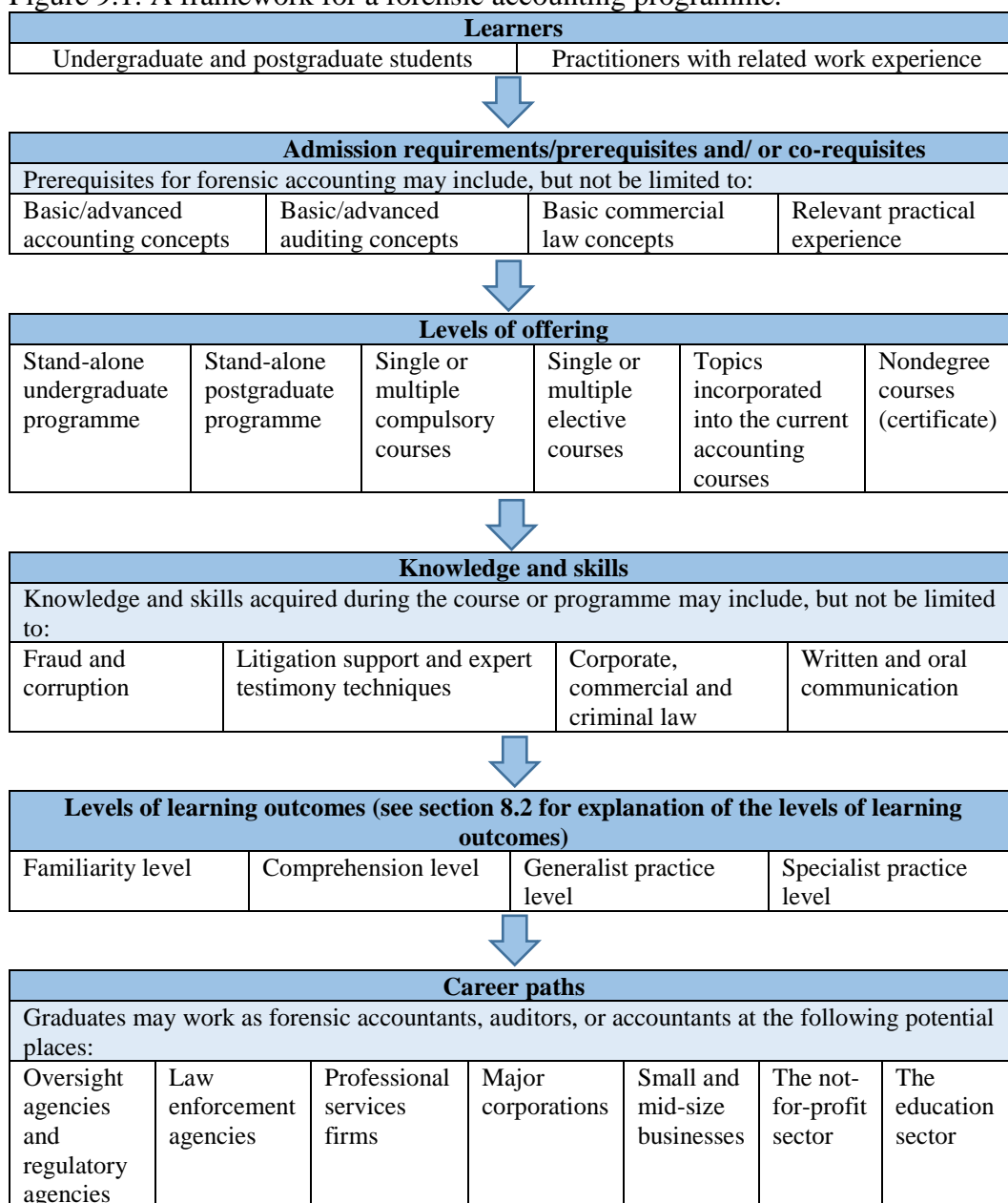
forensic accounting education framework developed in this research can be used to define the concepts, knowledge, and skills that learners should have acquired by the end of a course, a degree programme, a professional development programme, or a training module. This framework can also be used to develop a teaching strategy, assessment methods, and curriculum development strategy. Moreover, this framework can be of use in a wide range of disciplines related to the forensic accounting field such as digital forensics, forensic psychology, and forensic law.

The forensic accounting education framework developed in this research can be used by universities, polytechnics, and nonuniversity vocational education providers in both the public and private sectors. In addition to its usefulness for education providers, this framework can be used by other interested stakeholders including control and professional bodies, law enforcement agencies, professional services firms, legal services firms, executives, board committees, and audit committees. This framework can help those stakeholders understand the concept and evolution of forensic accounting and its current and potential role in the Jordanian economy. A better understanding of forensic accounting can accordingly help those stakeholders identify staff development needs and develop employee training and development strategies. Finally, this framework sharpens insights regarding the strategic and tactical use of data emerging from the perspective of cultural and contextual analysis in terms of forensic accounting practice and education.

As illustrated in Figure 9.1, learners interested in forensic accounting may have studied, or be studying towards, an undergraduate or postgraduate degree in accounting or in forensic-related fields such as business, law, IT, or criminology. Others may be practitioners with related experience. Instructors, curriculum developers, and education providers will determine the appropriate prerequisites for studying forensic accounting for each level of offering. For example, basic accounting and auditing knowledge may be considered as a sufficient prerequisite for studying a forensic accounting course at the undergraduate level, while a wider base of knowledge that extends beyond accounting and auditing to commercial and criminal law may be necessary for studying an advanced forensic accounting course at the postgraduate level. In addition to the education requirements, relevant

practical experience may be identified as a prerequisite for studying at advanced levels such as a master's degree in fraud examination or a professional training course in anti-money laundering.

Figure 9.1: A framework for a forensic accounting programme.



Source: Author

Forensic accounting education may be offered in the form of topics incorporated into current offerings at either the undergraduate or postgraduate level; as [a] single or multiple course/s; as a stand-alone programme, or as [a] nondegree, professional training course/s. The forensic accounting knowledge and skills that learners are expected to acquire at each of the above levels of offering may differ greatly

depending on the depth (the complexity) and breadth (variety) of learning which happens at each level of offering and which, in turn, determines the level of learning outcomes that learners are expected to achieve at the four levels. These range from the simplest, the familiarity level, to the most complex, the specialist practice level. For example, learners studying three forensic accounting courses at the undergraduate level are expected to acquire the knowledge and skills that allow them to meet the learning outcomes at the comprehension level and, therefore, to be able to meet the market's higher standards in terms of their ability to deal with fraudulent activities. On the other hand, learners studying towards a bachelor's degree in forensic accounting are expected to acquire the knowledge and skills required to meet the learning outcomes at the generalist practice level and, therefore, to be able to enter the forensic accounting job market as entry-level generalists. Those who want to specialise in a particular field of forensic accounting need to enter a postgraduate degree programme or take [a] nondegree course/s (certificate/s).

Finally, various career paths are available to learners interested in fraud and forensic accounting in places such as oversight agencies, regulatory and law enforcement agencies, professional services firms, and major corporations. On the basis of both their interest and the forensic accounting knowledge and skills they possess, graduates can decide which career to pursue. Learners can focus their studies on the necessary postgraduate degree or professional training courses to prepare themselves for a specific career.

9.3 Contributions and Implications

This section discusses the implications of this research. Potentially, these form a resource to help decision makers, legislators, oversight agencies, professional associations, education providers, and businesses in Jordan to address issues related to three areas that have been explored in this study. The following subsections present the conclusions and contributions on them.

9.3.1 Implications for the Jordanian leadership, policy makers, and civil society associations.

There is no shortage of evidence on the vital role of forensic accounting techniques in preventing and detecting fraud and corrupt practices (Amernic & Craig, 2004; Huber, 2013; Kramer et al., 2017; Rezaee et al., 2004). However, the effectiveness of such techniques and of anticorruption initiatives becomes questionable within a system that does not allow citizens to hold influential figures and officials to account (Wallace & Pendlebury, 2014).

In his parliamentary speech on the 18 April (2017), Muhammad Nouh, a current MP and former minister of both Awqaf and Islamic Affairs and of Youth and Sport, said:

if the Jordanian people, based on the Audit Bureau report, became convinced not to pay taxes and their obligations to the government until the government takes actions against those who proved to be corrupt or have been mentioned in the Audit Bureau report, then the Jordanian people are right. Because people pay the dinar to go in the right place, but we pay dinars and millions and they go to a group of corrupt [people]! I swear to Allah this is injustice.

The speech of this MP and former minister is in line with the discussion in section 7.2 about the correlation between government integrity and services and tax compliance. Hence, transparency, accountability, justice, and economic growth should be the key objectives and means whereby to rebuild public trust. To create public satisfaction, the government should also aim for improvements in the areas of regulation, taxation, public services, and infrastructure.

The political will is a key force in driving changes and reforms (Wallace & Pendlebury, 2014). However, building political will in countries like Jordan, where the notions of democracy and active citizenship are as yet out of reach (see sections 2.2 and 7.2) is challenging (Brysk, 2013). Power holders in such countries are unlikely to initiate the building of the political will required for reform unless they are pressurised to do so by civil society (Sayre & Yousef, 2016). Professional associations, human rights campaigns and movements, and other civil society

associations have to step up as independent actors representing the interests of the public and create pressure for reform, using the limited degree of freedom that does exist in Jordan. Furthermore, for the required reforms to be successfully implemented, it is essential that proper and adequate abilities, skills, resources, and mechanisms are also available. Thus, successful reform requires the wide participation of citizens, academia, and private sector organisations.

Forensic accounting education and practice cannot simply be discussed in isolation. Such discussion requires deep consideration of government policy and politics, the rule of law, and business practices that pervade every aspect of the field that is concerned with governance and accountability and the pursuit of justice in a society. The lack of transparency, accountability, and justice in Jordan entrench political, social, and economic divisions that prevent the development of effective governance in the country's public and private sectors (Amnesty International, 2017; Schenker, 2015; Transparency International, 2016). Hence, creating an effective role for forensic accounting techniques and anticorruption initiatives requires a comprehensive change that begins with constitutional reform. This comprehensive change should also seek to win the public's respect and trust through fostering the values of justice and accountability, ensuring genuine political and financial independence of oversight agencies, strengthening the rule of law, and establishing an impartial and accessible criminal justice system.

9.3.2 Implications for oversight agencies and the Jordanian Association of Certified Public Accountants.

Growing public frustration with the mismatch between formal goals and the actual realities of anticorruption initiatives is clear in Jordan (Amnesty International, 2017; Schenker, 2015; Transparency International, 2016). Despite the establishment of several oversight agencies in the last decade, corruption continues to rise in Jordan. Jordan is perceived as more corrupt and less transparent than in 2006, according to its ranking in Transparency International's (2016) Corruption Perceptions Index. In 2016, Jordan ranked fifty-seventh internationally, dropping 17 places down the ranking list compared to 2006. Hence, citizens of Jordan feel that oversight agencies

are ineffective and that anticorruption initiatives yield nothing beyond formalities and commitments.

In the fight against fraud and corruption, it is essential that Jordanian oversight agencies regain the trust of businesses and the public and build business-government-civil society partnerships. Nevertheless, in the absence of political will and holistic legislative reforms (see section 7.2), the credibility crisis becomes ever more serious, which, in turn, leads to decreased business and civil society involvement in combating fraud and corruption. Rebuilding the relationship between civil society, including businesses and academia, and the government and its agencies requires that policies and strategies are translated into practices on the ground. Such reformation begins with a higher degree of government openness and responsible dialogue at every level.

The issuance of Act number 13 of (2016) (for further details see section 7.3.2) was a small but positive step to overcome the overlapping problems among oversight agencies and to enhance their independence; However, of itself this step does not necessarily enhance their transparency and accountability. The analysis of the differences between the new and the cancelled laws is beyond the scope of this chapter. However, a brief comparison between law number 13 of (2016) (the new law) and law number 62 of (2006) (the cancelled law) reveals that the new law has addressed some of the independence and overlap issues discussed above in relation to the Jordanian oversight agencies as follows: first, adding the term ‘integrity’ to the name of the new law reflects its focus on public integrity and transparency as key components in the fight against corruption. This emphasis is also clear in the Commission’s objectives under article number 4 of the new law (2016); second, under article number 3 of the new law (2016), the commission will have a juridical personality and will be financially and administratively independent. Furthermore, it is no longer linked to the prime minister, as was the case under the cancelled law. This change can be viewed as a trend towards a more independent role for the Commission and towards less influence or interference from the government. Third, article number 20 of the new law (2016) stresses the Commission’s right to request any data or documents from any party in the course of performing its tasks and identifies punishments for the omission or unjustified delay in the submission of

information. This article allows the Commission to operate in a practical way and to use legal tools to enforce the submitting of data necessary for the performance of its tasks.

However, the new law (2016) also throws up several issues. First, the chairperson, members, and staff of the Commission are no longer required to disclose their assets prior to assuming their duties, as was required under article number 8 of the cancelled law. This lack of disclosure might pose a threat to the principles of transparency and accountability. Second, despite the magnitude of financial crimes within the private sector in Jordan, and tax evasion in particular, the new law (2016) places only a marginal focus on the corruption and financial crimes within the private sector. For example, article number 4 (2016) includes 11 objectives for the Commission: only one of them, however, addresses the private sector. Third, the multiplicity and complexity of tasks assigned to the Commission has the potential to make it challenging for it to reach its objectives. In addition, this multiplicity of tasks appears to create new overlaps between the Commission and other oversight agencies such as the National Centre for Human Rights and the Anticorruption Office—General Intelligence Directorate (see Appendix 11 for details about the objectives, scope of work, and duties and authorities of the major oversight agencies in Jordan).

The director of the Jordan Integrity and Anticorruption Commission (JIACC), Muhammad Al-Allaf, declared after the establishment of the Commission: “Jordan’s anticorruption legislations are in crucial need for revision”, which is something that “requires extensive work over the next 10 years” (Amman Chamber of Commerce, 2016, para. 4). To unify its efforts, the Commission should begin by identifying the core role of oversight agencies and then solving the overlapping problems between them (see Appendix 11 for details about the objectives, scope of work, and duties and authorities of the major oversight agencies in Jordan). The revisions and reforms to the anticorruption legislation should also focus on empowering oversight agencies to develop and implement anticorruption initiatives and strategies through supportive laws and regulations, staff with adequate knowledge and skills, and the use of technology. Moreover, these revisions and reforms should ensure that oversight agencies are: independent, both financially

and politically; have clear guidelines, rules, and effective mechanisms for enforcing the accountability; and, have the power to prosecute.

Most importantly, the impact of the legislative revisions and reforms should be felt by citizens. This outcome will not occur until oversight agencies have the power to interrogate and prosecute government leaders and the party in power. In addition, oversight agencies will not win the public's respect until democratic and transparent methods are used to select those who lead them³⁶. Oversight agencies will not win the public's trust until safeguards exist to ensure that these agencies do not themselves become a source for extortion and corruption.

As the only national accounting association in Jordan, the Jordanian Association of Certified Public Accountants has the obligation to help practitioners and the profession to stay ahead in a changing world. Developing their professional exams, broadening their services, and creating new products to meet a changing business and community need to lie at the heart of this obligation. With evolving technology, more complex information, and the prevalence of financial crimes in today's business environment, practitioners with forensic accounting knowledge and skills are vital allies in the fight against fraud and corruption. Hence, the Jordanian Association of Certified Public Accountants should work and coordinate with the country's oversight agencies, audit firms, and academia to raise awareness and encourage training, education, and research in forensic accounting. These efforts need to be reflected by integrating and enhancing forensic accounting topics throughout the accounting curricula and in the JCPA exam content. The development and offering of a separate forensic accounting degree and/or certificate might also be considered as options.

As discussed earlier, the poor pass rate for the JCPA exam, which has always hovered around 10 per cent, creates a kind of monopoly and shortage of accounting and auditing professionals. Whether the low pass rate is attributable to the difficulty

³⁶ Under article number 6 of law number 13 (the law of Jordan Integrity and Anticorruption Commission) of (2016), "the Commission shall be managed by a Board consisting of a chairperson and four members known for their fairness, integrity, neutrality and expertise, not holding other nationality, and shall be appointed by a royal decree upon a recommendation made by the Prime Minister" (United Nations Development Programme (UNDP), 2016).

of the exam and lack of preparation materials, as candidates claim, or to poor background knowledge and preparation by candidates, as the Jordanian Association of Certified Public Accountants argues (see section 7.3.1), or both, as this study concludes, a multisectoral approach is needed to solve this problem. Accounting academia and practitioners need to work together to ensure that accounting curricula at higher education institutes are designed to prepare learners properly for the JCPA exam and the accounting profession. In addition, independent experts need to undertake a thorough and transparent review of the administration, structure, scoring, and fairness of the JCPA exam in order to remedy the exam's low pass rate.

9.3.3 Implications for curriculum developers and education providers.

Accounting education providers are under increased pressure to provide high quality education that is directly relevant to different stakeholder groups (Howieson, 2003; Low et al., 2013; Sikka et al., 2007). Accounting educators and practitioner trainers have to simultaneously meet the requirements of academia and professional organisations, the expectations of prospective employers, the needs of learners, including practitioners with related experience, mature learners, and those with nontraditional learning styles (Tan & Laswad, 2015). This is a challenging task and a tricky balancing act that does not in the foreseeable future appear to be lessening.

The perceived gap between accounting education and professional practice in Jordan (see section 6.4.1); the failure of 116 postgraduate specialisations in Jordanian public universities to meet the higher education accreditation standards (see section 2.5); the political and economic changes seen in the last few years (see sections 2.2); the miscarriages of anticorruption initiatives (see section 7.2); the issuance of act number 13 of (2016) (see section 7.3); and, the poor pass rate for the JCPA exam (see section 7.3.1) all serve as reasons to revisit the framework in which accounting is being taught and to define the landscape within which forensic accounting is to be taught in Jordan. The aforementioned problems create the need for significant reforms in accounting education in Jordan. It is hoped that this study will act as a medium to initiate and direct dialogue about how forensic accounting is perceived and conducted, how it can be taught, and what every stakeholder can

contribute to the reform of accounting education and the development of forensic accounting education in Jordan.

Reform of accounting education in Jordan should consider the integration of forensic accounting into the universities' accounting curricula. As financial scandals and audit failures have created a crisis of credibility for the accounting profession, this study affirms that forensic accounting has the potential to restore the credibility of the profession through addressing three key matters: first, by enhancing graduates' skills and competencies to meet higher professional standards in terms of their ability to deal with fraudulent activities and the growing complexities of the business environment; second, by raising future graduates' awareness of the consequences of unethical behaviour, increasing their ability to make ethical decisions, and their willingness to behave ethically; third, by taking accounting education beyond its technical dimension and reestablishing its connection with the political and social world.

This study affirms that up-to-date, relevant forensic accounting teaching must be context-based and, as much as possible, interactive (Buehl, 2017; O'Flaherty & Phillips, 2015). It is undeniable that funds are required to achieve high quality forensic accounting education. Funds are, specifically, important to undertake research, to get access to a range of teaching resources, and for instructors' staffing and training. However, this study argues that achieving effective forensic accounting teaching is more about making efficient use of classroom time and space, being creative with available resources, engaging students in learning, and creating assessments that reflect the learning that the curriculum is aiming to promote. The basic concepts, skills, and techniques of forensic accounting can be taught with easily sourced materials, and even with the current lack of 'context-relevant' 'textbooks' (see section 6.4), if married with adequate online alternatives such as case studies, YouTube tutorials, and professional exam materials. Thanks to the Internet, resources such as these are available for free. The growth of the number of individuals and institutions sharing their digital educational resources over the Internet openly and for free offers opportunities for improving access to forensic accounting knowledge and research and innovative teaching methods. Some ideas

for ways to integrate innovation into interactive sessions and assessments have been presented in sections 8.4 and 8.5.

9.4 Limitations

Two possible limitations of the study need to be acknowledged. The first limitation is connected to the gender imbalance and the representativeness of a sample consisting of 36 males and 4 females. While the research sample is clearly not gender-balanced, it may be representative in that it reflects the distribution of gender groups within the target population (Dickinson, Adelson, & Owen, 2012). A cursory review of the web pages of faculty staff at the departments of accounting at the five biggest universities that offer accounting programmes in Jordan shows only 2 female faculty members among the 52 faculty staff who hold a PhD (Al al-Bayt University, 2017; Balqa Applied University, 2017; The Hashemite University, 2017; The University of Jordan, 2017; Yarmouk University, 2017). Likewise, there was an obvious preponderance of males amongst those interviewed from audit firms and oversight agencies. Furthermore, despite the dominance of male participants, it may be argued that the findings are unlikely to be gender-biased, as the main topics discussed through this study (that is, requirements to develop a framework for forensic accounting education in Jordan) are largely gender-neutral.

The second limitation lies in the possibly sensitive nature of some aspects of the research topic. In aiming to develop a framework for a forensic accounting programme, this study inevitably touched, either directly or indirectly, upon fraud and corruption and the levels, types, and motivations for these in Jordan in the discussions with participants. Considering the limited degree of freedom of expression and right to criticise in Jordan (Amnesty International, 2017), some participants may have felt it uncomfortable to discuss fraud and corruption issues openly. However, the situation *vis à vis* fraud and corruption in Jordan was not the main theme of the research. Furthermore, as a Jordanian, the researcher was familiar with the participants' culture and the context in which the data collection process was conducted. This cultural familiarity helped to ensure that the participants felt safe, comfortable, and at ease during the interviews. Finally, particular care was taken throughout the research process to maintain confidentiality, build confidence,

and ensure the participants' commitment (see Appendix 9 and Appendix 10 for the Participant Information Sheet and the Consent Form). It was also made clear to participants that they had the right to decline to answer particular questions without giving a reason and to withdraw if they so desired (within 30 days of the interview taking place) without any negative consequences.

9.5 Suggestions for Further Research

This study has highlighted a number of rich areas for further research. First, this study has contributed to a better understanding of the concept and the current state of forensic accounting practice and education globally, and in Jordan particularly, through conducting a review of the literature, performing a metaanalysis on selected publications, and undertaking interviews with a range of forensic accounting stakeholders. Future research can potentially also target recruitment and financial services websites with the aim of assessing the current state of forensic accounting practice by looking at trends, as well as the types and nature of forensic accounting services that organisations demand and supply.

Second, this study has developed a framework for forensic accounting (see section 9.3.1) that provides the basis of a model for further research into how to meet the expectations and balance the interests of stakeholders when developing forensic accounting curricula in different contexts. This research can be done by conducting surveys, perhaps with a particular focus on specific organisations and industries. This framework can also be used as a basis for studies that target specific education providers and explore their perceptions on the anticipated opportunities and challenges of offering forensic accounting education.

Third, the findings noted that religion and culture play an important role in shaping the ethical perceptions, behaviours, and actions of Jordanians. Examining the influence of Jordanian culture and Islamic values and beliefs on the relationship between the state and society will allow researchers to extend this understanding. A better understanding of this relationship has the potential to enable dialogue between the state and the public and to ensure an effective role for citizens and civil society institutions in promoting integrity and eradicating fraud and corruption.

9.6 Final Reflection

Born in Jordan, raised in the United Arab Emirates and of Palestinian origin, my interest in culture, human rights, and peace commenced at a young age whilst living in a conflict region. However, this interest was only one factor among a dozen other factors that involved choosing my major. Most of these factors were financial, and my core concern was not to end up in a major that would land me in one of the many unemployment lines in the region.

Early in my junior freshman year, I had the feeling that accounting did not appear to be the best pathway through which to follow my passion for human rights and social justice. At some point, I questioned my degree choice and wondered whether a degree in medicine or law would perhaps be a better pathway to transform my passion into a successful career. However, switching majors was not a choice, as I envisioned doing so as a kind of failure. Instead, I decided to complete my accounting degree as soon as I could, in the hope that it would, at least, help me to get a temporary job and income that would allow me to study toward another degree.

I completed my bachelor's degree in accounting in 3 years instead of 4 and was ready for the next big step, although I still was not yet sure about my destination. I undertook a thorough search at this stage which led me accidentally, but fortunately, to find my future wife and love, Ruba Harfeil, rather than a degree that I would love to study. Ruba was a student at the school of medicine, and she too shared my passion for human rights and social justice. [Despite] being a medical student, Ruba was able to help me discover the human side of accounting and to contemplate the significant role of accounting in improving social justice by promoting transparency, accountability, and fairness. The moment I found my soulmate, I found what has since then been a passion of mine—forensic accounting. However, what looked like a happy ending actually turned out to be a challenging beginning.

While doing both full-time accounting work and studying for my master's in accounting in Jordan, I was struggling to find any academic or practitioner who shared my interests in forensic accounting. I felt as if forensic accounting was there,

in the audit class, in the few journal articles that I was able to access, in the manipulated statements that our company has received from our suppliers, and in the bribe ‘tipping’ that the company had to pay to get basic things done. Nonetheless, no one seemed to want to see or research this important topic.

I completed my master’s, prepared a preliminary proposal, and started searching for opportunities to do my PhD in forensic accounting at a Western university. Again, the results I got were not what I was expecting or looking for. Most of responses that I received had the same content: ‘our professors’ backgrounds and interest do not fit with your topic’.

When I was about to lose hope, a letter came to me from the University of Waikato, New Zealand advising me that my application to do my PhD in forensic accounting had been considered. I was so excited that I forgot to Google ‘New Zealand’ to see in which continent it lies (my idea was that it should be somewhere in Europe among the countries whose names end with the letters ‘land’) before accepting the offer. However, the fact that New Zealand is the ‘green end of the world’ had little significance, as all I wanted was supervisors who would guide me on my research journey.

Luckily, at Waikato Management School I found more than supervisors. Professor Grant Samkin, Dr Vida Botes, and Professor Howard Davey were more of mentors. They have shown me, rather than taught me, how to be and feel more confident about my work; to respect the work of others; to present my ideas clearly: to listen to feedback carefully: to respond critically; and, to be generous in my thoughts and with my time. Going against the ‘bean-counting and numbers crunching’ stereotype of the accounting profession and exploring the human side of accounting through my PhD journey would not have been possible without the guidance of my supervisors.

The world needs greater transparency, accountability, and fairness. It needs balance. It is time for accountants to go beyond balancing the books and to promote these three principles in an unbalanced world. It is now time for accounting academics to

consider the interests of the public and the wide range of stakeholders when developing the curricula.

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Appendices

Appendix 1: Selected major public and private sector cases investigated by the JACC in 2011 and 2012

Public sector cases	
Case common name	Brief description of the case
The Disi Water Conveyance Project feasibility study.	The <i>Disi</i> Water Conveyance Project is a water supply multimillion-dollar project in Jordan. The project was managed and conducted by the Development and Investment Projects Fund of the Jordan Armed Force (DIP). The Jordan Anticorruption Commission (JACC) in 2011 found evidence of corruption in the project funds management; include an exaggerated and unreasonable payment of millions of dollars to local and international companies. The defendants were referred to the State Security Court since it considered as a financial crime that causes damage to the economic status of the Kingdom.
Khaled Shahin Travel.	Shahin is an influential Jordanian businessman. In 2011, he sentenced to prison in a corruption case worth US\$2.1 billion, related to the expansion project of Jordan Petroleum Refinery Company LTD. (JPRC). But later Shahin allowed by the Interior minister to travel to the United States for medical treatment. In 2011 under a heavy public pressure, the case referred to the JACC, ministers of Health and Justice resigned, and Jordan exerted international diplomatic efforts to prosecute Shahin, ended with the return of Shahin to Jordan to be arrested again.
Decent Housing for Decent Living, The Royal initiative.	The initiative developed to build homes for poor Jordanians, offering them at reduced prices, with affordable payments. In 2011, the case referred to the JACC in suspicions of corruption worth millions of dollars related to the minister of labour Sahal AlMajali (His father is a former minister and a former Parliament President) and other ministers. The JACC referred the case to the Parliament, as the defendants are ministers, and according to the Jordanian constitution, ministers could not be interrogated before the parliament approval. On April 2012, the Parliament rejected to refer any of the ministers regarding the case for investigation.
Al Aqaba Port	The Board of Commissioners of Aqaba Special Economic Zone (ASEZ) authorised the sale of strategic lands of ASEZ to a foreign company, and reduced the lands price from around US\$21,116 million to approximately US\$8,867 million, without tender, and without consulting the concerned authorities, both of which are contrary to Jordanian law. The JACC began investigations into the case in 2012.
Orphans Fund Development Foundation	In 2011, the JACC found Initial evidence of financial excesses of millions of dollars, by the Director General of the foundation and the members of the investment committee.
Private sector cases	
Case common name	Brief description of the case
Amwal Invest	Amwal Invest is a Jordan-based financial services firm that provides investment management and investment banking

	service. The Firm is listed on the Amman Stock Exchange with a paid-up capital of around US\$63.4 million. In 2011, a small group of interested parties investigated informally the company performance and indicated for several suspected corruption cases in the company profile. After investigation, the Jordan Anticorruption Commission (JACC) accused the company board of directors of committing financial violations worth around US\$52 million. The JACC investigations also showed that All Amwals' 14 subsidiaries are fake unlicensed companies, founded for fraudulent purposes. All the defendants have been referred to the JACC prosecutor general for the necessary legal action.
Jordan French Insurance Company (JOFICO)	JOFICO is a Jordan-based Insurance services firm, The Firm is listed on the ASE with a paid-up capital of around US\$12.8 million. The main fraud case in JOFICO was the abuse of office by the company general manager, where he was issuing cheques by fake names to be collected later in his favour. The accused has been referred to the JACC prosecutor general for the necessary legal action.
Al Barakah Takaful Company	Al Barakah Takaful is a Public Shareholding Jordanian company which provides insurance products in Jordan. The JACC Investigations revealed that the company's chairman in addition to other members of the board of directors have concluded several significant transactions with companies owned by them or by their relatives, which is considered as conflict of interest, contrary to the Jordanian companies law. The accused has been referred to the JACC prosecutor general for the necessary legal action.
Baytona Company	Beit Al-Mal Saving and Investment (Baytona) is a Public Shareholding Jordanian company operates in the real estate and investment sector. The JACC uncovered significant financial and legal violations by the company's board of directors, involving around US\$56.4 million obtained from a large group of citizens, in order to be invested in real estate projects. The accused has been referred to the JACC prosecutor general for the necessary legal action.

Source: Summarised from Jordan Anticorruption Commission (2011), Jordan Anticorruption Commission (2012), Najjar (2010), and Baybars (2013), and re-presented in a table format for visual presentation purposes.

Appendix 2: The Numbers of Faculty Members and Students in a Number of Jordanian Universities

University		Numbers of faculty members			Numbers of undergraduate students			Numbers of Postgraduate students		
		Humanities	Sciences	Total	Humanities	Sciences	Total	Humanities	Sciences	Total
1	University of Jordan	658	811	1469	24,383	12,617	37,000	3,168	1,239	4,407
2	Yarmouk University	614	305	919	21,765	8,238	30,003	3,891	1,448	5,339
3	Mutah University	261	238	499	9,854	6,603	16,457	1,447	353	1,800
4	Jordan University of Science and Technology	0	814	814	0	21,714	21,714	0	1,168	1,168
5	Al-Ahliyya Amman University	106	133	239	2,936	2,284	5,220	80	32	112
6	Philadelphia University	109	119	228	2,515	2,735	5,250	21	32	53
7	Isra University	113	93	206	3,646	3,083	6,729	42	50	92
8	Al-Zaytoonah University of Jordan	177	133	310	5,185	3,163	8,348	25	5	30
9	Princess Sumaya University for Technology	35	44	79	769	1,373	2,142	49	59	108
10	Applied Science Private University	167	141	308	4,743	3,207	7,950	51	0	51
11	University of Petra	190	117	307	4,594	1,260	5,854	76	45	121
12	Al al-Bayt University	355	260	615	7,382	5,491	12,873	700	213	913
13	Irbid National University	74	19	93	2,684	459	3,143	0	5	5
14	Jerash Private University	119	47	166	3,607	1,624	5,231	198	0	198
15	Zarqa University	154	99	253	4,374	2,127	6,501	33	4	37
16	The Hashemite University	205	351	556	11,923	11,024	22,947	568	161	729
17	Al-Balqa' Applied University	60	344	404	0	0	8,652	605	130	735
18	Amman Arab University	85	8	93	504	57	561	925	55	980
19	Al-Hussein Bin Talal University	85	154	239	5,055	3,596	8,651	54	0	54
20	Middle East University	129	17	146	1,663	296	1,959	684	82	766
21	Tafila Technical University	83	112	195	2,078	3,368	5,446	49	0	49
22	German Jordanian University	95	94	189	712	1,533	2,245	282	25	307
23	Jadara University	73	43	116	2,553	446	2,999	306	0	306
24	The World Islamic Science University	188	39	227	5,900	264	6,164	2,291	0	2,291
Total		4,135	4,535	8,670	128,825	96,562	234,039	15,545	5,106	20,651

Source: Adapted from Fraij and Shihab (2012).

Appendix 3: Accounting Curriculum Framework Imposed by the Jordanian Higher Education Accreditation Commission

A. The basic theoretical obligatory fields:

Field of knowledge	The minimum credit hours
Financial Accounting: Principles of Accounting (1), Principles of Accounting (2), Intermediate Accounting and Accounting for Companies (1), Intermediate Accounting and Accounting for Companies (2), Advanced Accounting.	12
Accounting Theory and International Standards: Financial Statement Analysis, International Accounting Standards, Accounting Theory, International Accounting.	12
Management Accounting and Auditing: Management Accounting, Cost Accounting, Auditing, International Standards on Auditing.	12
Accounting Systems: Accounting Information System, Tax Accounting, governmental Accounting, Bank Accounting and Insurance.	12

B. Support fields:

Field of knowledge	The minimum credit hours
Economics, Finance, Management Information System, Statistics and Mathematics for Management Science.	12

Source: Adapted from Higher Education Accreditation Commission (2015).

Appendix 4: The Accounting Syllabus at Yarmouk University



Faculty of Economics and Administrative Sciences Accounting Department

STUDY PLAN FOR THE BACHELOR'S DEGREE IN ACCOUNTING

The Bachelor's Degree in Accounting is awarded upon the fulfillment of the following requirements:

- The conditions specified in the Regulations for the Awarding of the Bachelor's Degree at the Faculty of Economics and Administrative Sciences.
- 132 hours are needed to satisfy Degree Requirements as follows:

First: University requirements (27 credit hrs) which include:

a- Obligatory courses (21 credit hrs):

Course No.	Course Title	Credit Hours
LS 100*	English Language Skills I	3
LS 111	English Language Skills II	3
MS 100	Military Sciences	3
AR 100	Arabic Language I	3
AR 102	Arabic Language II	3
HIST 102	Education of Citizenship	3
CS 100	Introduction to Computer Application	3

* Subject to English equivalent exam

b- Elective requirements (6 credit hrs) to be chosen from courses offered by university colleges other than the College of Business and Administrative Sciences. (The Students can take Management Skills Course for 498)

Second: Faculty requirements (24 credit hrs)

Course No.	Course Title	Credit Hours
ACC 101	Principles of Accounting	3
BA 101	Fundamentals of Management (1)	3
PAD 160	An Overview of Public Management	3
BF 210	Principles of Finance (1)	3
CS 101 C	Selected Programming Language (Visual Basic)	3
STAT 107	Statistical (Non Science Students)	3
ECON 101	Principle of Macroeconomics	3
ECON 105	Principle of Mathematical Economics	3

Third: Department requirements (81 credit hrs):

1. Single major course requirements (81 credit hrs), as follows:

a- Obligatory courses (75 credit hrs):

Course No.	Course Title	Credit Hours
ACC 102	Fundamentals of Accounting (2)	3
ACC 201	Intermediate Accounting (1)	3
LAW 121	Commercial Law	3
ECON 200	Research Methods in Economics	3
PAD 201	Organization Behavior	3
MKT 220	Principles of Marketing 1	3
BA 230	Quantitative Analysis 1	3
PAD 270 A	Fundamentals of Public Finance	3
BF 311	Investment	3
ACC 202	Intermediate Accounting (2)	3
ACC 210	Accounting For Companies	3
ACC 311	Bank Accounting	3
ACC 321	Accounting for Governmental and Non-Profit Organizations	3
ACC 331	Cost Accounting (1)	3
ACC 341	Financial Statement Analysis	3
ACC 351	Auditing (1)	3
ACC 361	Tax Accounting	3
ACC 371	Computerized Accounting	3
ACC 402	Advanced Financial Accounting	3
ACC 431	Cost Accounting (2)	3
ACC 432	Management Accounting	3
ACC 451	Auditing (2)	3
ACC 471	Accounting Information Systems	3
ACC 480	Accounting Theory	3
ACC 491	Research	3

b- Elective requirements (6 credit hrs)

Must be chosen from Accounting Department (200 level and above).
(The Students can take Management Skills Course for 498)

Degree Requirements/ Major in Accounting

132 hours are needed to satisfy the degree requirements as follows:

Requirements	Obligatory Courses	Elective Courses	Total
University	21	6	27
College	24	-	24
Department	75	6	81
Total	120	12	132

2. Major in Accounting / Minor in other departments (81 credit hrs):

a. Obligatory courses (60 credit hrs):

Course No.	Course Title	Credit Hours
ACC 102	Fundamentals of Accounting (2)	3
ECON 102	Principle of Microeconomics	3
BA 101	Fundamentals of Management (2)	3
Econ 200	Research Methods	3
ACC 201	Intermediate Accounting (1)	3
PAD 201	Organization Behavior	3
ACC 202	Intermediate Accounting (2)	3
ACC 210	Accounting For Companies	3
MKT 220	Principles of Marketing 1	3
BA 230	Quantitative Analysis 1	3
BF 311	Investment	3
ACC 321	Accounting for Governmental and Non-Profit Organizations	3
ACC 331	Cost Accounting (1)	3
ACC 351	Auditing (1)	3
ACC 361	Tax Accounting	3
ACC 402	Advanced Financial Accounting	3
ACC 431	Cost Accounting (2)	3
ACC 432	Management Accounting	3
ACC 480	Accounting Theory	3
ACC 491	Research in Accounting	3

(The Students can take Management Skills Course for 498) as Elective Course.

b. Minor in other departments (21 credit hrs):

These courses are chosen by the student. This is an opportunity to individualize your degree, to make it reflect your personal skills and talents. A minor specialization can be chosen from any of the following areas: All Departments at the Faculty of Business and Administrative Sciences, Law, Computer Science, Information Technology, Management Information Systems, Mathematical Statistics, Applied Statistics, Mathematics, English Language, Political Science, Shari'a, Economics & Islamic Institutions.

Degree Requirements/ Major in Accounting/Minor

132 hours are needed to satisfy Degree Requirements as follows:

Requirements	Obligatory Courses	Elective Courses	Total
University	21	6	27
College	24	-	24
Department	60	-	81
Minor Requirements	According to the Minor requirements		21
Total			132

3. Minor in Accounting (21 credit hrs):

First: Students of the Faculty of Economics and Administration Sciences departments:

a. Obligatory courses (15 credit hrs):

ACC 201, ACC 202, ACC 341, ACC331, ACC 351.

b. Elective courses (6 credit hrs):

To be chosen from the 200 level courses and above offered by the Departments of Faculty of Economics and Administrative Sciences as well as BA 498.

Second: Students from outside the Faculty of Economics and Administration Sciences.

a. Obligatory courses (15 credit hrs):

ACC 101, ACC 102, ACC 201, ACC 202, ACC 331.

b. Elective courses (6 credit hrs):

Chosen from the 200 level courses and above offered by the Accounting Department as well as BA 498.





Academic Plan Form

Faculty: Economics & Administrative Sciences
Program: Bachelor

Division: Department of Accounting

Ser	Course Code	Course Name	Course Description	Credit hours Num.		Prerequisite
				Theoretical	Practical	
1	Acc 101	Fundamentals of Accounting (1)	Basic Concepts, the double-entry, accounting system, the accounting cycle, merchandising operations, cash transactions and receivables and commercial papers, special journals, preparation of financial statements.	3	-	Acc 101
2	Acc 102	Fundamentals of Accounting (2)	Inventories and cost of goods sold, accounting problems relating to long-lived assets, short-term liabilities, payroll accounting, introduction to partnership accounting and corporations accounting. Prerequisite: Acc 101.	3	-	Acc 102
3	Acc 201	Intermediate	Introduction to financial accounting	3	-	Acc 201

		Accounting (1)	theory, measurements of the elements of financial statements, accounting for assets applications on the international accounting standards. Prerequisite: Acc 102. Short-term liabilities, stockholders equity, correction of errors, disclosures of changes in accounting methods, revenue measurement and income determination, accounting for leases and pension, statement of sources and uses of fund, applications of the international accounting standards. Prerequisite: Acc 201.			
4	Acc 202	Intermediate Accounting (2)	Definition and characteristics of a partnership, formation at a partnership, division of profits and losses, changes of partnership capital, admission and retirement of partners, partnership financial statement, consolidation and liquidation. Prerequisite: Acc 102.	3	-	Acc 102
5	Acc 210	Accounting For Companies	Introduction to partnerships accounting and corporation accounting, forming partnerships and corporation, measuring profitability of partnership and corporations, accounting for liquidation, admission or withdrawal of	3	-	Acc 102

			partners, increasing and decreasing capital for partnership and corporations, accounting for bonds, instructions of issuing companies disclosure, accounting and auditing standards.			
6	Acc 302	Specialized Financial Accounting	Special accounting treatment of various specialized organizations such as agricultural projects, hire-purchase and installments, consignments and divisions. Prerequisite: Acc 102.	3	-	Acc 102
7	Acc 311		Introduction to Bank accounting, types & function of banks the commercial banks. Introduction & Accounting procedures for different departments of banks preparing financial statements in banks.	3	-	Acc 102
8	Acc 321	Accounting for Governmental and Non-Profit Organizations	Fun theory; government budget, The accounting systems, internal control, journal entries of governmental transactions, control on revenues and expenses; the final account. Prerequisite: Acc 102.	3	-	Acc 102
9	Acc 331	Cost Accounting (1)	Introduction to cost accounting, cost behavior, cost-volume-profit analysis, cost classification, cost accumulation, job order costing, process costing, cost	3	-	Acc 102

			allocation, joint and by-products, income statement of manufacturing companies. Prerequisite: Acc 102.			
10	Acc 341	Financial Statements Analysis	Methods used to analyse financial information which could reveal the financial strength or weakness on any firm, analysis of balance sheet, analysis of income statement, analysis of statement of cash flows. Prerequisite: Acc 102.	3	-	Acc 202
11	Acc 351	Auditing (1)	Introduction, professional code of ethics, objectives and responsibilities of auditors, types of audit evidence and documentation, audit planning, estimating materiality and risk, study and evaluation of internal control system, auditing of sales and collection cycle, auditing report, international auditing standards. Prerequisite: Acc 202.	3	-	Acc 102
12	Acc 361	Tax Accounting	Objectives of tax systems, efficiency and equity of taxes, tax structure in Jordan, Jordanian income tax law, computing income tax for employees, individuals, partnerships and corporations with different activities,	3	-	Acc 102

			evaluation of income tax law and accounting for Zakat. Prerequisite: Acc 102.			
13	Acc 371	Accounting applications on Computer	Using computers in recording and classifying financial transactions, preparing the financial statements, and inventory control. Prerequisite: Acc 102.	3	-	Acc 102
14	Acc 381	Islamic Accounting	Accounting measures in Islam, elements of expenditures and revenues, accounting for Islamic Banks, accounting for Zakat, accounting for inheritance. Prerequisite: Acc 102.	3	-	Acc 202
15	Acc 401	Problems and Cases in Accounting	Accounting tools for dealing with different types of problems and cases including problems of sole proprietorship, partnerships, corporations, co-operatives, agricultural projects, inflation accounting. Prerequisite: Acc 202	3	-	Acc 202
16	Acc 402	Advanced Financial Accounting	Advanced aspects in branches, mergers, re-organization liquidation, and consolidated financial statements, foreign currencies transactions. Prerequisite: Acc 202.	3	-	Acc 331

16	Acc 431	Cost Accounting (2)	Standard cost accounting and deviation analysis, variable and absorption costing, cost behavior, regression analysis, cost estimation, advanced aspects of process costing, contract costing. Prerequisite: Acc 331.	3	-	Acc 102
18	Acc 432	Management Accounting	Introduction to management accounting, cost-volume-profit relationship for multi-product firms, short-term decisions, the comprehensive budget, capital budgeting, divisional performance measurement and transfer pricing. Prerequisite: Acc 102.	3	-	Acc 351
19	Acc 451	Auditing (2)	Tests of transactions, tests of balances, auditing samples, cases, international auditing guidelines. Prerequisite: Acc 351	3	-	Acc 202
20	Acc 471	Accounting Information Systems	Concepts related to analyzing, designing, using improving and controlling of effective accounting information systems, application to computers. Prerequisite: Acc 202.	3	-	Acc 202

21	Acc 480	Accounting theory	The role of accounting theory, accounting conventions, accounting principles, statements of fund and cash flow, interpreting and comparing of financial reports, financial accounting for holding companies, current cost accounting, accounting for social responsibility, Prerequisite: Acc 202.	3	-	
22	Acc 491	Research	Scientific research methods in accounting, theoretical studies, methods of data accumulation, testing and analyzing of data, writing the report.	3	-	Department Approval

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Source: Extracted from Yarmouk University (2017).

Appendix 5: Definitions of Commonly Used Terms Related to Corruption Forms

Author	Definition
Abuse of authority/function	A public employee or public office holder that is doing something which is illegal or something that the official has no legal authority to do, in order to obtain a personal economic benefit or cause an illegal damage to others.
Bribery	Offer, promise or give any undue pecuniary or other advantage, whether directly or through intermediaries, to a foreign public official, for that official or for a third party, in order that the official act or refrain from acting in relation to the performance of official duties, in order to obtain or retain business or other improper advantage
Collusion	An agreement, usually secretive, which occurs between two or more persons to limit open competition by deceiving, misleading, or defrauding others of their legal rights, or to obtain an objective forbidden by law typically by defrauding or gaining an unfair advantage.
Deception	An act to propagate beliefs that are untrue or not the whole truth (as in a half-truth or omission).
Embezzlement	The fraudulent appropriation of money or property by a person entrusted to safeguard the assets in another's interests.
Extortion	The unlawful use of one's position or office to obtain money through coercion or threats
Graft	A form of political corruption in which an official acquires financial gain by dishonest or unfair means, especially through the abuse of one's position or political influence
Kickbacks	A bribe to obtain an undue advantage, where a portion of the undue advantage is 'kicked back' to the person who gave or is supposed to give the undue advantage.
Money Laundering	A process whereby the identity and origin of illegally obtained money, such as bribes, are concealed or disguised.
Nepotism	A form of favouritism shown to family members without regard to merit.

Source: Adapted from Business Anti-Corruption Portal (2014).

Appendix 6: Interview Guide for the Development of a Framework for Forensic Accounting within a Jordanian Context (English version)

Each part of the interview guide consists of one or more main questions, and each main question is supported, as needed and appropriate, by several sub-questions.

Part 1: Incentives and barriers surround forensic accounting education in Jordan. This part consisted of one main question and one sub question. These two questions were supported, as needed and appropriate, by several sub-questions as follow:

Q1. What incentives and barriers surround forensic accounting education in Jordan?

- What is the current state of forensic accounting practice and education in Jordan?
- 1. Do you think the term forensic accounting or forensic audit is common in Jordan? And what is your understanding of the term forensic accounting?
- 2. How do you view the current and potential demand for forensic accountants in Jordan? Why?
- 3. How do you view the current and potential supply of forensic accountants in Jordan?
- 4. What do organisations expect from accountants, auditors, and forensic accountants?
- 5. To what extent do the Jordanian auditors have forensic accounting knowledge, skills and experience?
- 6. Describe the context in which forensic accountants operate and who employs them?
- 7. Are there cases of the use of forensic accounting services in practice in Jordan?
- 8. How and where forensic accountants are currently trained?
- 9. Under which circumstances do accountants have a critical need for forensic accounting skills and knowledge?
- 10. What types of job opportunities exist for forensic accountants in the local and neighbouring markets?
- 11. Which particular requirements should be taken into account in relation to forensic practice in Jordan?
- 12. To what extent do the Jordanian businesses, being generally closely-held family businesses with poor governance systems, accept forensic accounting services?

13. What do you perceive as the importance and the advantages of integrating forensic accounting into the accounting curriculum compared to teaching forensic accounting as a separate programme in Jordanian universities?
14. Is forensic accounting education expected to raise the accounting student's willingness to behave ethically?
15. Which legal indications (if any) do you foresee if accountants are trained to detect fraud?
16. What are the other perceived benefits of forensic accounting education and practice in Jordan?
17. What barriers exist to teaching forensic accounting in Jordan?
18. In terms of educational capabilities, which obstacles exist with regard to the integration of forensic accounting into the accounting curriculum in Jordanian universities?
19. In terms of financial possibilities, which obstacles exist regarding the integration of forensic accounting into the accounting curriculum in Jordanian universities?
20. What other obstacles exist in terms of the integration of forensic accounting into the accounting curriculum in Jordanian universities?

Part 2: Reforms are necessary to develop forensic accounting practice and education in Jordan. This main question was supported, as needed and appropriate, by several sub-questions as follow:

1. To what extent do you think that Jordanian culture accepts forensic accounting services?
2. To what extent do the Jordanian regulations, regulatory authorities, and courts require the use of forensic accounting services?
3. How do you perceive the role of regulatory/ government/ oversight authorities/ agencies involved in providing forensic accounting services in Jordan?
4. How do you perceive the relationship between culture and religion in Jordan and corruption?
5. How do you perceive the relationship between the political, legal and regulatory environment in Jordan and corruption?
6. How do you perceive the relationship between the economic and business environment in Jordan and corruption?

Part 3: The framework for forensic accounting education in Jordan. This part consisted four main questions that address the programme structure, the programme/ course content and skill development, the andragogy, and the assessment. These four-main questions were supported, as needed and appropriate, by several sub-questions as follow:

Q1. Programme structure: Towards which aims and objectives are we teaching and how should the curriculum be structured?

1. Which particular requirements should be taken into account in relation to forensic education in Jordan?
2. Can you please list at least three core learning outcomes of a forensic accounting programme?
3. At which level in a tertiary institution should a forensic accounting course be offered (Prompt question: undergraduate, postgraduate, both undergraduate and postgraduate, none)?
4. What do you perceive the barriers and the disadvantages of integrating forensic accounting into the accounting curriculum as opposed to teaching forensic accounting as a separate programme in Jordanian universities?

Q2. Programme/ course content and skill development: What should we teach?

1. Which skills should forensic accountants possess?
2. Which characteristics should forensic accountants possess?
3. What knowledge (concepts, ideas, interpretations, and applications) must be included in a forensic accounting course syllabus to enable students to achieve the intended learning outcomes of the course?
4. What pre-existing knowledge is required for a student to have a reasonable chance of success in being a forensic accountant?
5. Can you please indicate what you think of as the appropriate percentage of balance of content: depth/breadth, knowledge/skills and processes/values?

Q3. Andragogy: How can teaching most effectively contribute to students' learning towards the intended learning outcomes?

1. What are the most appropriate and practical learning resources when teaching forensic accounting?
2. Which materials, textbooks, and case studies are recommended for a forensic accounting programme?
3. What action should schools take to prepare their faculty to teach forensic accounting?

Q4. Assessment: How should students' learning and progress be measured?

1. What methods/techniques should be used to assess students' achievement of learning outcomes?
2. Should assessment be continuous, happen at the end of the course, or be a mixture of both?

Part 4: Comments, feedback and closing the interview. This part consisted of one main question. This main question was supported, as needed and appropriate, by several sub-questions as follow:

Q1. Would you like to add any further comments?

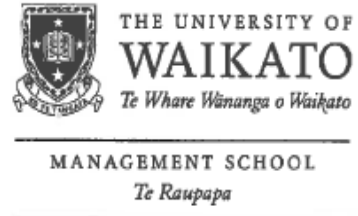
1. Please feel free to comment on forensic accounting education and practice in Jordan.
2. Please feel free to comment on my research topic, my interview questions, or my interview process.

Thank you for participating in the interview and for taking the time to answer my questions. It would be my pleasure as well to share my study with you once its available.

Appendix 7: Ethical Approval

Research Office
Waikato Management School
The University of Waikato
Private Bag 3105
Hamilton 3240
New Zealand

Amanda Sircombe
Research Manager
Phone +64 7 838 4376
Fax +64 7 838 4063
Email amandas@waikato.ac.nz
www.management.ac.nz



6th May 2015

Ahmed Saleh
91 Denver Place
Hamilton

Dear Ahmed

Ethical Application WMS 15/33

A Stakeholder Approach to the Development of a Framework for Forensic Accounting within a Jordanian Context

As per my earlier email the above research project has been granted Ethical Approval for Research by the Waikato Management School Ethics Committee.

Please note: should you make changes to the project outlined in the approved ethics application, you may need to reapply for ethics approval.

Best wishes for your research.

Regards,

Amanda Sircombe

Amanda Sircombe
Research Manager

Appendix 8: Introductory Letter to Participants (English version)

Introductory letter to participants

Waikato Management School

Te Raupapa



THE UNIVERSITY OF
WAIKATO
Te Whare Wānanga o Waikato

Department of Accounting
Waikato Management School
University of Waikato
aka19@students.waikato.ac.nz

30 September 2019

Dear Sir/Madam,

My name is Ahmed Saadeh and I am a PhD student at the University of Waikato in the accounting department under the supervision of Professor Grant Samkin. I would like to invite you to participate in a research project entitled:

A Stakeholder Approach to the Development of a Framework for Forensic Accounting within a Jordanian Context

The field of forensic accounting is relatively new. Frequent high-profile financial scandals have given rise to concerns about the credibility of financial reports and have highlighted the importance of forensic accounting. This has created an educational opportunity for institutions that currently provide related courses and programmes. However, there is little background data available with respect to forensic accounting education in the context of developing countries, including Jordan.

This research aims to explore forensic accounting requirements bearing in mind Jordan's particular cultural, educational and business context, in order to design a framework for a forensic accounting programme. This framework will provide an

integrated visualisation of the ideal format, content and delivery of a forensic accounting programme for Jordanian universities.

This research uses interviews. Approximately 40 interviewees will be enrolled in the study. Interviewees will include academics, auditing and forensic accounting practitioners, and staff from several state agencies such as the Anticorruption Commission and the Higher Education Accreditation Commission. Through the interview, you will be asked, as a participant, to provide your opinion on issues and requirements that should be considered when developing a framework for forensic accounting compatible with the Jordanian context. Each interview will be recorded and will take approximately 60 minutes.

Please read the attached information sheet that contains further information regarding the research before deciding whether or not to participate. If you would like to be a participant in this research please contact me by return email and I shall get back to you via telephone or email to schedule an interview at a time and a place that is most convenient to you. Particular care will be taken throughout the research process to maintain confidentiality.

I value your expertise and appreciate your assistance in this research endeavour, and feel that the findings will contribute significantly to the forensic accounting education literature. If you have any comments or questions, you are welcome to contact me (or my supervisors Professor Grant Samkin, Associate Professor Vida Botes and Professor Howard Davey) using the contact details provided in the attached information sheet. I hope you will consider participating in this project.

Yours truly,
Ahmed Saadeh

Introductory letter to participants

مقدمة تمهيدية للمشاركين

Waikato Management School

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قسم المحاسبة

كلية وايكاتو للإدارة

جامعة وايكاتو

هاميلتون- نيوزلندا

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11 يونيو 2015

أختي المشاركة/أخي المشارك

السلام عليكم ورحمة الله وبركاته

أنا أحمد سعادة، طالب دكتوراة في تخصص المحاسبة بجامعة وايكاتو، تحت إشراف الأستاذ الدكتور جرانت

سامكن. أنتشرف بدعوتك للمشاركة في مشروع بحثي والذي هو تحت عنوان

نحو تطوير إطار عملي للمحاسبة الجنائية/

منحى أصحاب المصلحة ضمن سياق الأردن

تُعَدّ المحاسبة الجنائية مجالاً جديداً نسبياً اكتسب اهتماماً كبيراً في الفترة الأخيرة، حيث يتم تسليط الضوء

عالمياً بشكل متزايد إلى أهمية العلوم المحاسبية ذات العلاقة بالتدقيق وفحص الاحتيال والغش، وتحديد

المحاسبة الجنائية، في الارتقاء بمستوى مهنة المحاسبة وتطوير واقع اقتصاديات المجتمع بشكل عام. ومن

هنا نشأت الحاجة لدراسة وتطوير واقع تعليم المحاسبة الجنائية ببعديها، الكمي والنوعي، من أجل تلبية تطلعات

شريحة واسعة من المستفيدين من المحاسبة الجنائية، مما يخلق فرصاً للكليات والجامعات والمعاهد التعليمية

للمساهمة في جسر الهوة بين الطلب والعرض على المحاسبة الجنائية.

على الرغم من الحاجة المتزايدة للمحاسبين والمدققين الماليين الذين يمتلكون مهارات التعامل مع الغش والاحتيال، لا توجد جهود أو معلومات فيما يتعلق بالمحاسبة الجنائية وإدخالها إلى حقل التعليم في الدول النامية عموماً والأردن خصوصاً إلا في نطاق محدود وضيق جداً. ومن هنا، تأتي هذه الدراسة في محاولة لتطوير إطار عملي للمحاسبة الجنائية يتوافق مع الطبيعة الثقافية والبيئة التعليمية وبيئة الأعمال في الأردن. سيقدم هذا الإطار العملي صورة متكاملة للشكل والمضمون وأساليب التعليم الأمثل للمحاسبة الجنائية في مؤسسات التعليم العالي في الأردن.

يتضمن هذا البحث إجراء حوالي أربعين مقابلة مع أكاديميين في مجالات متعلقة بالمحاسبة الجنائية وخبراء من وزارة التعليم العالي والبحث العلمي وهيئة اعتماد مؤسسات التعليم العالي، إضافة إلى عدد من الممارسين لمهنتي التدقيق والمحاسبة الجنائية في شركات تدقيق خاصة ومؤسسات رقابة عامة مثل ديوان المحاسبة وهيئة مكافحة الفساد. سيطلب الباحث من المشاركين في المقابلات تزويدهم بآرائهم حول القضايا والمتطلبات التي يجب أخذها بعين الاعتبار عند تطوير إطار عملي للمحاسبة الجنائية متوافق مع سياق الأردن. تستغرق المقابلة الواحدة حوالي ستين دقيقة ويستمر تسجيلها صوتياً ثم تفرغها نصياً لغايات تحليل البيانات.

أرجو منك أختي المشاركة/ أخي المشارك قراءة استمارة المعلومات المرفقة والتي تحتوي معلومات إضافية حول البحث قبل اتخاذ القرار بالمشاركة أو عدم المشاركة. سأكون بالغ الامتنان لمشاركتك في هذا البحث، في حالة موافقتكم على المشاركة الرجاء التكرم بإعلامي بذلك عبر الرد على هذا البريد الإلكتروني (الإيميل)، وسوف أقوم بالتواصل معكم عبر الهاتف أو البريد الإلكتروني لتحديد موعد ومكان المقابلة بما يناسبكم. هذا ويؤكد الباحث على اتباع أعلى درجات العناية خلال جميع مراحل البحث للمحافظة على سرية هوية المشاركين وخصوصية المعلومات التي يدلون بها.

أختي المشاركة/ أخي المشارك،

أقدر خبرتكم ومساهمتم في هذا البحث العلمي، وأتوقع أن تشكل نتائج هذا البحث إضافة هامة للدراسات المتوفرة حول تعليم المحاسبة الجنائية. إذا كان لديكم أي ملاحظات أو أسئلة، أرجو من حضرتكم التواصل معي أو مع المشرفين على هذه الدراسة، الأستاذ الدكتور جرانت سامكن أو الدكتورة فيدا بوتس، من خلال العناوين المبينة في استبانة المعلومات المرفقة لديكم. أشرف بمشاركتم في هذا البحث وأسعد بمساهمتمكم المقدرة في تحقيق مساعي هذا البحث العلمي.

وتفضلوا بقبول فائق الاحترام والتقدير

أحمد سعادة

طالب دكتوراة

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Participant Information Sheet

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A Stakeholder Approach to the Development of a Framework for Forensic Accounting within a Jordanian Context

What is the purpose of this research?

This research is part of a doctoral dissertation at the University of Waikato that seeks to develop a framework for a forensic accounting programme, compatible with the Jordanian cultural, educational and business context. The field of forensic accounting is relatively new. Currently, there isn't a significant body of academic research into forensic accounting—specifically forensic accounting education. However, there is a growing demand for forensic accounting services all over the world and in Jordan as well. This is creating an opportunity for colleges, universities, and other educational institutions that choose to provide related courses and programmes. This research aims to develop a framework for a forensic accounting programme to be considered by business schools in Jordan in order to satisfy a wide range of forensic accounting services and education stakeholders.

Who is associated with this research?

The following people are associated with this research:

Researcher:

Ahmed Saadeh
Department of Accounting
Waikato Management School
University of Waikato
aka19@students.waikato.ac.nz

Supervisors:

Professor Grant Samkin
Department of Accounting
Waikato Management School
University of Waikato
grantsam@waikato.ac.nz

Associate Professor Vida Botes
Department of Accounting
Waikato Management School
University of Waikato
vidab@waikato.ac.nz

Professor Howard Davey
Department of Accounting
Waikato Management School
University of Waikato
hdavey@waikato.ac.nz

What will my participation in the study involve?

You have been invited to take part in this study, voluntary and anonymously, as someone who would be able to provide the researcher with valuable opinions about the issue under study. This research uses interviews. Through the interview you will be asked to provide your opinion on issues and requirements that should be considered when developing a framework for a forensic accounting programme for Jordanian universities. Each interview will be recorded and will take approximately 60 minutes.

Will my taking part in the research be kept confidential?

The information you provide will be used to design a framework for a forensic accounting programme. All the information you give the researcher during the course of the research will be kept strictly confidential and used for the purpose of this study only. The data will be stored securely and read-access will only be available to the researcher and his supervisors. Data will be destroyed in a secure manner three years after completion of the study. The information will be used in a way that will not allow you to be identified individually. Upon agreeing to participate, you will be allocated an ID instead of your real names to facilitate data analysis and to protect your confidentiality.

Do I have to take part in this research? Can I withdraw?

Taking part in this research is entirely voluntary. If you do not wish to take part, you do not have to give a reason and you will be under no pressure to change your mind. If you decide to take part and change your mind later at any stage, you are free to withdraw. You also have the right to withdraw any information you have provided within 30 days of the interview taking place. You may also decline to answer particular questions without giving a reason.

Do I need to give written consent?

If you are interested in taking part, the researcher will ask you to sign a consent form.

What if I require further information?

If you have any queries regarding any aspect of the research, you can contact the researcher or his supervisors using the contact details provided in this information sheet.

What will happen to the results of the research study?

The results will be published in a doctoral dissertation. It is likely that the research results will also be disseminated through academic papers and at academic conferences and seminars. Moreover, in relation to establishing related programmes, potential universities in Jordan may have access to the data analysis findings.

Will I have access to the results of the research?

As a participant you will be provided with a report of the data analysis findings.



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ما هو الهدف من هذا البحث؟

هذا البحث هو جزء من رسالة دكتوراة في جامعة واكاتو-نيوزيلند يهدف إلى تطوير إطار عملي لتدريس المحاسبة الجنائية بما يتلاءم مع السياق الثقافي والبيئة التعليمية وبيئة الأعمال في الأردن. تعد المحاسبة الجنائية مجالاً جديداً نسبياً، بدت الحاجة إليها تصبح أكثر إلحاحاً كنتيجة لفضائح مالية كبرى هزت العديد من إقتصادات العالم في العقدين الماضيين. هذه الحاجة المتزايدة للمحاسبة الجنائية تخلق فرصاً للكليات والجامعات والمعاهد التعليمية للمساهمة في جسر الهوة بين الطلب والعرض على المحاسبة الجنائية. ولكن مع ذلك، يشككي الوسيط الأكاديمي والمهني بسواء من الافتقار للبحث العلمي في المحاسبة الجنائية، وتحديد في مجال تدريسها. هذه الدراسة تعتبر خطوة هامة نحو تلبية تطلعات شريحة واسعة من المستفيدين من المحاسبة الجنائية تدريجياً وتطبيقاً في الأردن.

من هم الأشخاص وما هي المنظمة المرتبطة بهذا البحث؟

التالية أسماءهم لهم ارتباط بهذا البحث:

الباحث: أحمد سعادة

قسم المحاسبة

كلية واكاتو للإدارة

جامعة واكاتو

aka19@students.waikato.ac.nz

المشرفون:

الأستاذ الدكتور جرانت سامكن

هاورد ديفي

قسم المحاسبة

كلية واكاتو للإدارة

جامعة واكاتو

الأستاذ مشارك فيدا بوتس

قسم المحاسبة

كلية واكاتو للإدارة

جامعة واكاتو

الأستاذ الدكتور

قسم المحاسبة

كلية واكاتو للإدارة

جامعة واكاتو

على ماذا تنطوي مشاركتي في هذا البحث؟

تمت دعوتك للمشاركة في هذه الدراسة على اعتبارك شخص لديه القدرة على إثراء البحث من خلال تزويد الباحث بأرائك القيمة حول موضوع الدراسة. مشاركتك في هذه الدراسة تطوعية ولن يتم التعريف في أي من مراحل البحث بأي من معلوماتكم الشخصية. يتضمن هذا البحث إجراء مقابلات، وسيتم سؤالك كمشارك في هذه المقابلات حول رأيك في القضايا والمتطلبات التي يجب أخذها بعين الاعتبار عند تطوير إطار عملي لتدريس المحاسبة الجنائية متوافق مع السياق في الأردن. تستغرق كل مقابلة ستون دقيقة تقريباً.

هل ستبقى مشاركتي في هذا البحث سرية؟

المعلومات التي ستقدمها خلال هذا البحث ستستخدم في تصميم إطار عملي لتدريس المحاسبة الجنائية في مؤسسات التعليم العالي الأردنية. جميع المعلومات التي ستقوم بتزويدها للباحث خلال هذا البحث ستحفظ بسرية تامة ولن تستخدم لأي غرض آخر بخلاف هذا البحث. سيتم حفظ المعلومات ضمن ظروف أمان عالية ولن يسمح بالاطلاع عليها إلا من قبل الباحث والأساتذة المشرفين على البحث. بعد الانتهاء من البحث سيتم إتلاف جميع المعلومات بطريقة آمنة. سيتم استخدام المعلومات بطريقة لن يتم التعرف من خلالها على هويات المشاركين، إلا إذا وافق المشارك على إظهار اسمه أو أي من معلوماته الشخصية الأخرى. بمجرد موافقتك على المشاركة، سيتم إعطاءك اسم مستخدم بدلاً من اسمك الحقيقي وذلك من أجل تسهيل عملية تحليل البيانات والمحافظة على خصوصية المشاركين.

هل يجب علي المشاركة في هذا البحث؟

المشاركة في هذا البحث طوعية تماماً. إذا لم ترغب بالمشاركة فلن تحتاج لإبداء أي أسباب لذلك ولن يكون هناك أي ضغوطات من قبل الباحث لتغيير رأيك. إذا قررت المشاركة ثم قمت بتغيير رأيك لاحقاً فذلك الحق بالانسحاب خلال أي مرحلة من مراحل الدراسة. يمكنك أيضاً الانسحاب من الدراسة أو سحب أي معلومات كنت قد قدمتها وذلك خلال 30 يوماً من تاريخ إجراء المقابلة ولن يكون هناك أي نتائج سلبية لذلك. يمكنك أيضاً عدم الإجابة عن أسئلة محددة بدون إبداء أي أسباب.

هل أحتاج لتقديم موافقة خطية على المشاركة؟

إذا كنت ترغب بالمشاركة، سيقوم الباحث بتزويدك بنموذج موافقة من أجل أن تقوم بتوقيعه.

ماذا لو احتجت لمزيد من المعلومات؟

إذا كان لديك أي استفسارات في أي من جوانب البحث، تستطيع التواصل مع الباحث أو المشرفين باستخدام معلومات التواصل المبينة في الصفحة الأولى من هذا النموذج.

ماذا سيحصل لنتائج هذا البحث؟

سيتم نشر نتائج هذا البحث في رسالة دكتوراة، وقد يتم عرضها أيضاً من خلال أوراق بحثية ومؤتمرات وندوات علمية.

هل سيتمكنني الوصول لنتائج هذا البحث؟

بصفتك مشاركاً في هذا البحث، سيتم تزويدك بتقرير حول نتائج تحليل البيانات.

Appendix 10: Consent Form

Consent Form for Participants

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Te Whare Wānanga o Waikato

A Stakeholder Approach to the Development of a Framework for Forensic Accounting within a Jordanian Context

Consent Form for Participants

I have read the **Information Sheet for Participants** for this study and have had the details of the study explained to me. My questions about the study have been answered to my satisfaction, and I understand that I may ask further questions at any time.

I understand that I am free to withdraw from the study at any time up to one month after the interview, or to decline to answer any particular questions in the study. I agree to provide information to the researchers under the conditions of confidentiality set out on the Information Sheet.

I agree to participate in this study under the conditions set out in the Information Sheet form.

I agree to the audio recording of this interview.

Signed: _____

Name: _____

Date: _____

Researcher's Name and contact information:

Ahmed Saadeh
Department of Accounting
University of Waikato
aka19@students.waikato.ac.nz

Supervisor's Name and contact information:

Professor Grant Samkin
Department of Accounting
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Associate Professor Vida Botes
Department of Accounting
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Professor Howard Davey
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Waikato Management School
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Consent Form for Participants

نموذج موافقة

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نحو تطوير إطار عملي للمحاسبة الجنائية/
منحى أصحاب المصلحة ضمن سياق الأردن

نموذج موافقة

لقد قرأت نموذج معلومات المشاركين في الدراسة وحصلت على شرح كاف عن تفاصيل الدراسة وإجابات وافية على أسئلتى وأعلم أنه يمكنني توجيه أسئلة أخرى للقائمين على الدراسة في أي وقت. وأنا أعلم أنه يمكنني أن أرفض المشاركة في الدراسة أو رفض المشاركة على أسئلة بعينها أو الانسحاب من الدراسة في أي وقت.

أعطي موافقتي بحرية على المشاركة في هذه الدراسة وإعطاء معلومات للباحث وفقاً لكل ما هو مبين في نموذج المعلومات.

التوقيع:

الإسم:

التاريخ:

أسماء الباحث والمشرفين والعناوين التي يمكن التواصل معهم من خلالها:

الباحث: أحمد سعادة

قسم المحاسبة

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المشرفون:

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Appendix 11: A Comparison of the Major Public Oversight agencies in Jordan

The Audit Bureau	
Objectives	<ul style="list-style-type: none"> • Auditing the revenues and expenditures of the state, and ways of its spending, in addition to, auditing the deposits, advances, loans settlements, and warehouses. • Providing advice in the fields of accounting for the entities falling under the jurisdiction of the Audit Bureau. • Auditing public money to ensure that it has been expended in a sound, legal, and effective manner. • Insuring the compliance with the applied environmental legislations. • Insuring that the administrative decisions and procedures made by the entities falling under the supervision of the Audit Bureau are being made in accordance with the applied rule.
Scope of work	<ul style="list-style-type: none"> • All government ministries, departments, agencies, public official institutions, and independent official entities. • The Municipal Boards, Boards for Corporate Services and the Greater Municipality of Amman. • An entity that the Council of Ministries may require the Audit Bureau to audit; provided that its fund is defined as public fund and raised under the provision of the law (this include; Syndicates, Professional Unions, Charities and Voluntary bodies). • The Companies that the government owns (50 per cent) and more of its shares.
Duties and authorities	<ul style="list-style-type: none"> • Present an annual report to the House of Representatives which includes: any irregularities, deficiencies, or weaknesses in the performance of the audited entities, together with its recommendations for addressing these irregularities, at the beginning of the ordinary session of the Parliament, and at any time the House of Representatives may requires the Audit Bureau to provide it with any audit report. • Audit the government revenues and expenditures, deposits, advances, loans, settlements, and warehouses accounts. • Provide advice in the areas of audit and accounting for the entities subject to the audit of the Audit Bureau. • Audit public money to ensure that spending has been carried out in a sound, legal, and effective manner. • Ensure compliance of the public entities with the applied environmental legislations. • Ensure that the administrative decisions and procedures made by the public entities are being made in accordance with the applied legislation. • Auditing the accounts, cash, and stamps, as well as verifying the financial documents, vouchers, and supplies of any public entities at any time. • Auditing any financial transactions not stated above as it may find it necessary for the purpose of conducting its audit. It is entitled to have access in any public entity to all fiscal and accounting transaction at any stage of its audit, whether such transactions relate to revenue or expenditure. It shall call for or question directly the accounting officers who are in charge of these accounts. • Conducting any examinations as it may find it necessary to ensure that the accounts are properly maintained, and that the actions adopted against irregularities and fraudulent acts are adequate and effective. It may bring to notice any gap that appears to it in the financial and administrative legislation whether it is related to finance or administration. It shall verify whether laws, regulations and instructions related to finance and accounts are fully complied with, and shall bring into notice any cases of noncompliance. He may report his views on whether the regulations and instructions in force are adequate to realise the purposes of the fiscal laws.

	<ul style="list-style-type: none"> • Having access to all reports and information submitted by the financial inspectors, whether they have been financial inspectors or administrative inspectors, on matters pertaining to finance or administrative issues, as well as reports relating to investigations on financial or administrative irregularities. He may request any government employee to provide it with any statements or explanations on any audit issues.
Anticorruption Commission	
Objectives	<ul style="list-style-type: none"> • Draw up, implement and propose effective policies in coordination with authorities concerned with prevention and combating corruption. • Detect all forms of corruption, including financial and administrative corruption, nepotism and favouritism if constituting an infringement upon the rights of others and the public funds. • Ensure the principles of equality, equal opportunities and fairness. • Combat character assassination. • Cooperate in affording and applying for International Legal Assistance, if affording conditions are applied through official channels.
Scope of work	<ul style="list-style-type: none"> • All the cases where public officials and/or public authorities are involved or affected. • Private contractors and consultants can be considered to be public officials if they are exercising public official functions.
Duties and authorities	<ul style="list-style-type: none"> • Investigate financial and administrative corruption, uncover violations and breaches, gather evidences and information related thereto, initiate investigations and proceed with administrative and legal procedures necessary thereof. • Prosecute all who breach of the provisions of this Law, seizure his/her movable and immovable properties, ban from travel, request the relevant authorities to refrain him/her from performing work, stop his/her salary, allowances and all financial entitlements if necessary, and amend or cancel any said decisions in accordance with legislations in effect. • The Commission may commence the necessary investigations to follow up any corruption case on its own accord or based on intimation from any party, if the findings of the investigation or inquiry reveal that the intimation is false or malicious, the one who made the report shall be referred to competent judicial authorities in accordance with applicable legal rules. • Notwithstanding the provisions of any other legislation, the Commission shall render its decisions within a period not to exceed three months from the date of initiation of the investigation or inquiry procedures.
The Ombudsman Bureau	
Objectives	<ul style="list-style-type: none"> • Receive and address complaints of people regarding the decisions and practices of Public Administration or its employees that violate laws and regulations. • Ensure the Public Administration observance of the principles of legality, justice and fairness, and its commitment to standards of good governance. • Constitute through the above a resolute accountability tool and an effective control arm on the performance of public administration.
Scope of work	<ul style="list-style-type: none"> • Any party injured due to any Public Administration decision, measure, practice or omission thereof, shall have the right to submit a complaint against the concerned Public Administration before the Bureau provided that such is in line with the situations and procedures provided for in this Law.
Duties and authorities	<ul style="list-style-type: none"> • Investigate complaints regarding any decisions, recommendations, procedures or actions or omissions thereof of the Public Administration or its employees. No complaint against the Public Administration shall be accepted if it is still possible to challenge it before any administrative or judicial body or if its subject is under review before any judicial body or a judicial ruling was issued pertaining it.

	<ul style="list-style-type: none"> Pursuant to complaints submitted to it regarding Public Administration procedures, to issue recommendations to simplify administrative procedures in order to enable citizens to benefit from services provided by the Public Administration with efficiently and ease.
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Source: Summarised from Jordan Anticorruption commission (2013), Jordan Audit Bureau (2013), and Jordan Ombudsman Bureau (2011), and re-presented in a table format for visual presentation purposes.

Appendix 12: References identified in the guide for education and training in fraud and forensic accounting developed by West Virginia University

Textbooks and Instruction Materials
<p>Albrecht, W. Steve, Conan C. Albrecht, and Chad O. Albrecht. <i>Fraud Examination. Revised</i> Mason, OH: Thomson South-Western, 2006.</p> <p>Albrecht, W. Steve, and Chad O. Albrecht. <i>Fraud Examination & Prevention</i>. Mason, OH: Thomson South-Western, 2003.</p> <p>Anastasi, Joe. <i>The New Forensics: Investigating Corporate Fraud and the Theft of Intellectual Property</i>. Hoboken, NJ: John Wiley & Sons, 2003.</p> <p>Association for Certified Fraud Examiners. <i>Fraud Examiners Manual</i>, 2005.</p> <p>Bologna, G. Jack, and Robert J. Lindquist. <i>Fraud Auditing and Forensic Accounting</i>. Hoboken, NJ: John Wiley & Sons, 1995.</p> <p>Caseware IDEA, Inc. <i>IDEA 2004 Workbook</i>, 2004.</p> <p>Cheffers, Mark, and Michael Pakaluk. <i>Understanding Accounting Ethics</i>. Manchaug, MA: Allen David Press, 2005.</p> <p>Crumbley, D. Larry, Lester E. Heitger, and G. Stevenson Smith. <i>Forensic and Investigative Accounting</i>. Chicago: CCH Incorporated, 2005.</p> <p>Davia, Howard R., Patrick C. Coggins, John C. Wideman, and Joseph T. Kastantin. <i>Accountant's Guide to Fraud Detection and Control</i>. Somerset, NJ: John Wiley & Sons, 2000.</p> <p>DiGabriele, James, Ed. <i>Forensic Accounting in Matrimonial Divorce</i>. Philadelphia: Edwards, Inc., 2005.</p> <p>Friedman, Jack P. <i>Litigation Services Handbook Case Studies: Accounting, Economic, and Financial Issues in Litigation Support Research</i>. Hoboken, NJ: John Wiley & Sons, 2003.</p> <p>Internal Revenue Service. <i>Financial Investigations: A Forensic Approach to Detecting and Resolving Crimes</i>. IRS Publication 17 14 (Rev. 1-2002), Washington, DC: Internal Revenue Service, 2002.</p> <p>IT Governance Institute. <i>IT Control Objectives for Sarbanes-Oxley</i>. Rolling Meadow, IL: IT Governance Institute, 2004.</p> <p>Lanza, Richard B. <i>Proactively Detecting Occupational Fraud Using Computer Audit Reports</i>. Altamonte Springs, FL: The Institute of Internal Auditors Research Foundation, 2004.</p> <p>Mena, Jesus. <i>Investigative Data Mining for Security and Criminal Detection</i>. Oxford, UK: Butterworth Heinemann, 2003.</p>

<p>Wells, Joseph T. <i>Principles of Fraud Examination</i>. Hoboken, NJ: John Wiley & Sons, 2005.</p> <p>Wells, Joseph T. <i>Occupational Fraud and Abuse</i>. Austin: Obsidian Publishing Co., 1997.</p>
Journals Devoted to Fraud and Forensic Accounting
<p>Journal of Forensic Accounting</p> <p>Journal of Forensic Economics</p> <p>Journal of Fraud Studies (forthcoming)</p>
Case Studies
<p>The Association of Certified Fraud Examiners (ACFE) Educator Reference Material for members.</p> <p>Beasley, Mark S., Frank A. Buckless, Steven M. Glover, and Douglas F. Prawitt. <i>Auditing Cases: An Active Learning Approach, Second Ed</i> Upper Saddle River, NJ: Prentice Hall, 2002.</p> <p>Cases on auditing, fraud and forensic accounting published in <i>Issues in Accounting Education</i>.</p> <p>Cullinan, Charles P., and Gail B. Wright. <i>Cases from the SEC Files: Topics in Auditing</i>. Upper Saddle River, NJ: Prentice Hall, 2003.</p>
Professional bodies
<p>American College of Forensic Examiners (Certified Forensic Accountant)</p> <p>American Institute of Certified Public Accountants</p> <ul style="list-style-type: none"> - AICPA Consulting Standards in Litigation Engagements - Antifraud & Corporate Responsibility Resource Center - Business Valuation and Forensic & Litigation Services <p>Association of Certified Fraud Examiners</p> <p>Association of Government Accountants</p> <p>Committee of Sponsoring Organizations (COSO)</p> <ul style="list-style-type: none"> - <i>Report of the National Commission on Fraudulent Financial Reporting</i> (1987) - <i>Internal Control-Integrated Framework</i> (1992) - <i>Fraudulent Financial Reporting: 1987-1997, An Analysis of US Public Companies</i> (1999) - <i>Enterprise Risk Management-Integrated Framework</i> (2004) <p>Forensic Accounting Society of North America</p> <p>Institute of Internal Auditors</p> <p>IT Governance Institute</p>

<p>Information Systems Audit and Control Association (ISACA)</p> <p>National Association of Certified Valuation Analysts</p> <p>National Association of Corporate Directors</p> <p>National Litigation Support Services Association</p> <p>Network of Independent Forensic Accountants (England)</p> <p>Professional Liability Underwriting Society (PLUS)</p> <p>Risk & Insurance Management Society (RIMS)</p>
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Source: Adapted from West Virginia University (2007)